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Annual 1922 Catalog



*New Grant
Double Flowered Zinnia*

H.Q. SEEDS

PLANTS-BULBS
TREES-SHRUBS
GARDEN-PET &
POULTRY SUPPLIES

Routledge SEED & FLORAL CO

145 147 2nd St. PORTLAND ORE.

READ ALL ON THIS PAGE CAREFULLY

What WE Do and What YOU Should Do FORWARDING CHARGES BY PARCEL POST, EXPRESS OR FREIGHT By Mail or Parcel Post

OTHER STATES.—Customers ordering from other states must add postage (see rate table, page 2), if wanted by mail, otherwise shipment will be made by express or freight, transportation charges collect.

The following rules apply to the states west of the Rocky Mountains, i. e., OREGON, WASHINGTON, CALIFORNIA, IDAHO and MONTANA:

On Cash Orders we will at prices printed in this catalog send by prepaid parcel post all **Seeds** in packets, ounces, or single pounds.

Small Plants (not potted), **Bulbs**, **Roots** and 1-year-old **Roses** are prepaid unless otherwise stated.

SEEDS IN BULK.—When you order **Seeds** in quantity above 1 lb., add postage. (See parcel post rates, page 2.)

TOOLS, SUPPLIES, FOODS, REMEDIES, ETC.—On this class of goods we have marked the parcel post weight, including

packing (PP. Wgt.), so that you can add postage to catalog prices if you want them by parcel post.

HARDY FLOWERING SHRUBS, SMALL FRUIT, BERRY and ORNAMENTAL SHRUBS and PLANTS, CLIMBING VINES and 2-YEAR-OLD ROSE BUSHES can be sent by parcel post if necessary, but be sure you send extra money for packing and postage. Postage and packing charges will be specified on the different pages unless the prices are postpaid.

NOT MAILABLE.—Plants in pots, large branching shrubs, Evergreens of all kinds, that must be balled in earth, Fruit and Shade Trees, over 1 year old and taller than 3 feet cannot be sent by Parcel Post. Neither can Insecticides that are poisonous, flower pots, jardinières, bird cages, or liquids in larger than 1-pint cans.

By Freight or Express

We DO NOT at catalog prices pay freight or express charges on any stock we offer, unless so stated; therefore, take note of the following paragraph:

LARGE ORDERS.—Any gardener, institution or individual wishing seeds, plants, trees or supplies in large quantities is requested to mail a list of what is wanted, stating grade, size or amount, and we will promptly return it with our very lowest prices. A letter of inquiry may save you dollars if you want to buy in **QUANTITY**, or some **PARTICULAR STOCKS**.

ORDER EARLY.—We aim to execute all orders as soon as received, but during the rush season in April and May delays are unavoidable, which, however, can be partly overcome by our patrons anticipating their wants and ordering and taking delivery of their requirements early.

CASH WITH ORDER.—Please send money with the order sufficient to cover the whole bill. We decline sending goods "Collect on Delivery," unless remittance be made on account to guarantee acceptance.

CORRESPONDENCE.—We try to give prompt attention to all proper letters of inquiry, etc., but ask, as a favor, that all questions be stated clearly and briefly, and not on order sheets.

PREPAY STATIONS.—When you send in orders to go by freight or express be sure you send extra money to pay the transportation charges if your station is a prepay point, which is always the case where there is no regular agent. If you send more than enough, we will refund it as soon as we get the prepay bill. If not enough, we will write for the balance and expect you to remit promptly.

SEASONABLE STOCKS.—Many customers order plants and bulbs out of season—that is, before we get stocks in or perhaps too late in the spring. Rather than delay the balance of your order, we will send what is seasonable at once and defer the balance until proper planting season unless otherwise instructed.

REPORTS—GOOD OR BAD.—Will you help us to attain greater success by writing and telling us how our Seeds and Supplies reach you, how they grow and how you like them? We will certainly appreciate it. Your criticisms, if you have any, as well as your praises, are desired.

MISTAKES.—These will happen occasionally, in spite of all care. Write us at once, with copy of original order, if possible, and mistakes will be promptly rectified.

NOTE.—We use every precaution in procuring fresh, pure and reliable seeds, etc., but we, in common with other responsible seed houses, sell our goods subject to the following disclaimer, it being that adopted by the American Seed Trade Association, i. e.: We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs, nursery stock, roots or plants sent out and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are to be returned at once.

ROUTLEDGE SEED & FLORAL CO.

Routledge
SEED & FLORAL CO
145 147 2nd St. PORTLAND ORE.

NAME _____		DO NOT USE THESE SPACES
POST OFFICE _____ R. F. D. NO. _____		
STATION _____ (If different from P. O.)		
COUNTY _____	STATE _____	
DATE _____ AMOUNT ENCLOSED, \$ _____		
FORWARD BY _____ State if wanted by Mail, Express, Freight or Steamer. (Read Note on bottom of this page.)		Ack. _____ O. K'd by _____

Quantity.	NAMES OR ARTICLES WANTED.	Amount.	
	Amount Carried Forward		

NOTE.—Before you send this order read carefully what we have to say about parcel post and transportation charges on inside front cover and on page 1.

Conkey's NOX-I-CIDE

*The Stock Dip, Home Disinfectant and
Poultry Mite Liquid with a "Thousand Uses"*

This preparation has few equals in all-round usefulness. Every poultry yard, ranch, home, factory, stable, store, office building—in fact, every place where sanitation is necessary to health—needs Conkey's Nox-I-Cide every day in the year.

For poultrymen, Nox-I-Cide is indispensable as a red mite destroyer—paint it on the roosts and spray it into cracks. As a preventive of disease, it is unexcelled for cleansing and disinfecting coops, runs, brooders, fountains, and everything else about the premises. Spray premises daily when disease is present and once a week as a preventive of red mites, ticks, "blue-bugs" and disease epidemics.

As a veterinary wash in treating swine, sheep, stock, etc., Nox-I-Cide is widely used. For mange, itch, ringworm, galls, sores, scratches, sore mouth, eczema, foot rot,

proud flesh and other conditions requiring a disinfectant, Nox-I-Cide is employed. Sheep raisers, swine herds, cattlemen and others praise it highly as a dip and keep it on hand constantly for use wherever an effective germicide or insecticide is needed.

Try it for household use—for assisting in driving out ants, destroying odors, routing out bedbugs and cockroaches, for making sinks, cess-pools, garbage containers, etc., sanitary and safe—in fact, you will find that Conkey's Nox-I-Cide when properly diluted—you mix it with water according to directions—is an effective preparation which easily has the thousand uses ascribed to it.

	Pints	Quarts	Half Gallon	Gallons	5 Gallons	10 Gallons
*Price	45c	70c	\$1.15	\$1.80	\$8.75	\$17.00
Shipping Weight	3 lbs.	4 lbs.	10 lbs.	15 lbs.	55 lbs.	105 lbs.

ASK FOR PRICES ON SPRAYERS

Conkey's WHITE DIARRHEA REMEDY

Once you have used this old reliable preparation, you will never be without it. We can't speak too highly of this remedy—advise you not to try to do without it. As a preventive of bowel troubles, White Diarrhea and other digestive complaints, it has given great satisfaction for many years. Once started, diarrhetic conditions often sweep away the whole hatch—hundreds of chicks. Keep Conkey's Remedy in the drinking water until the danger period is past. The loss of one or a few chicks would more than offset the

cost of remedy used. 25c, 50c, \$1.00, Breeder size (1200 Tablets) \$3.50; \$3.60 postpaid.

Conkey's GAPE REMEDY

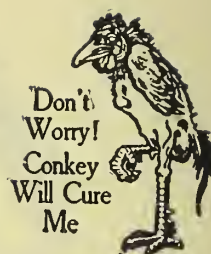
Gape worms accumulate in the windpipe and choke the chick to death. Don't try to extract worms with a wire or feather when

you can get such an effective remedy as Conkey offers. Conkey's Gape Remedy comprises two powders—both in same box for one price—one sifted over chicks causes them to dislodge the worms in windpipe by coughing, the other is a tonic powder which is mixed in the feed—to help the bird build up its resisting powers and retain its vitality. 25c, 50c; sent postpaid for 30c, 55c.



*Weights here given are for parcel post shipments, if shipment weighs 70 pounds or less for zones up to and including the third, and 50 pounds or less for zones up to and including the eighth. Larger shipments are sent express or freight collect. In remitting with order, consult weights and add postage for your zone. Postmaster can tell you in what zone you live from portland.

HAVE A CONKEY CORNER IN YOUR POULTRY HOUSE



Keeping Poultry Well—The Key to Success

RAISING poultry is pleasant and profitable when "good luck" is with you. Good luck, however, is not merely a matter of chance, but of **BEING PREPARED**.

For more than twenty-five years Conkey has been **THE POULTRY DOCTOR**. Take his advice. Install a *Conkey Corner* of remedies in your poultry house as insurance against disease, trouble, loss and disappointment.

We sell Conkey's Poultry and Stock Remedies on the following guarantee: *Money refunded cheerfully if any Conkey remedy does not satisfy.*

Conkey's ROUP REMEDY (POWDER)



When Roup breaks out there's no time to experiment—start treatment at once—the disease is very contagious.

Cold, rainy, muggy weather and changeable conditions intensify Roup. When birds begin to sneeze, froth in eyes, run at nose or

show other symptoms of a "cold," put Conkey's Roup Remedies in the drinking water. Sick birds doctor themselves and others are protected from catching the disease. Better still, *always* at the first sign of "roupy weather," place Conkey's Roup Remedies in fountains—it's a great preventative. Packages 25c, 50c, \$1.00; 5-lb. can \$5.75 postpaid.

Conkey's **ROUP PILLS** are for treating individual cases and for use at shows when birds develop colds. Packages 30c, 60c, \$1.20; breeder size (1000 pills) \$3.00; \$3.10 postpaid.

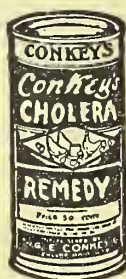
Conkey's **CANKER AND BRONCHITIS REMEDY** checks cankerous growths and sores and soon restores the bird to normal. This remedy is Conkey's specific

for bronchitis. Also desirable in treating individual cases of Roup and for use at shows when birds develop colds. Package 50c postpaid.

Conkey's **POULTRY WORM REMEDY** rids birds of many troublesome worms, thus promoting a return to healthy conditions. Give it as soon as you suspect worms—it will help the whole flock. Packages 25c, 50c—30c, 55c postpaid; breeder size, (5 lbs.) \$2.75; \$2.85 postpaid.

Conkey's **SCALY LEG REMEDY** applied to birds legs will in a few treatments kill the parasites responsible for the trouble and heal up the legs with a healthy lustre. Package 25c postpaid.

Conkey's CHOLERA REMEDY



So-called Cholera, bowel troubles, indigestion, diarrhea and kindred ailments often kill a whole flock in a few days. Diarrhea, a drowsy, listless appearance and great thirst—these are the signals to put Conkey's Cholera Remedy in the drinking water. It usually cools heated membranes and stops the trouble if given in time. Packages 25c, 50c, \$1.00; breeder size, (5 lbs.) \$2.50; \$2.65 postpaid.

Conkey's POULTRY LAXATIVE

Wherever a laxative or purgative is needed this remedy is just the thing for birds—by varying the dosage you can produce either a mild or a strong effect. Works without a debilitating after-effect. Experts say, and we have found through experiments that a poultry laxative given every week or two not only keeps birds in better condition, but increases the egg yield very materially. Poultrymen who now use Conkey's Poultry Tonic, with such splendid results, will find regular use of Conkey's Poultry Laxative very beneficial. If you are not employing this method, try it and be convinced. Packages, 25c, 50c; 30c, 55c postpaid; breeder size (5 lbs.) \$2.75; \$2.90 postpaid.

For Conkeys Full Line of Poultry Preparations see pages 1 and 162. For Symptoms of the most prevalent Poultry Diseases and Ailments see page 161. Its worth reading and keeping for reference.

The Four Routledge Brothers

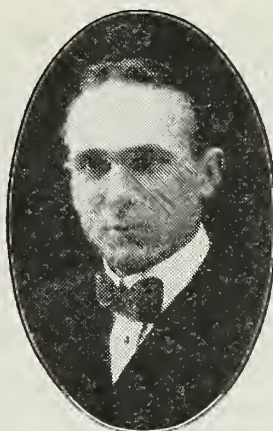
Learn to know them by their given names to save confusion



RALPH R.
Pres.-Gen'l Mgr.



J. IRA
Sec.-Treas.



C. H.—“DUKE”
Mgr. Salesroom



GEORGE L.
Mgr. Pet Stock Dept.
and Poultry Expert

Portland, Ore., January 1, 1922.

Greetings to Our Customers and Friends:

On this New Year's day we extend to all our customers and friends the "season's greetings." We wish you a very happy, prosperous and successful new year.

We have re-written and revised this catalog and made it right up to date. Some stocks have been discarded and others of increased value added.

Most prices are lower, some higher. Most all manufactured articles of wood and metal especially have declined in price. There is quite a shortage in some seeds and plants.

In our line of business it is a matter of "Quality First," then prices as low as we can make them. We are catering to the planters, growers and poultry keepers that appreciate Highest Quality and good service. We are in close touch with the world's best markets and know that our "prices" and "quality" are right. Thousands of our customers testify to this. You will find their reports scattered throughout this catalog. Read the one on bottom of page 27. Our rapidly increasing business leads us to believe we are giving efficient service and satisfactory stocks. If you don't think so, tell us, so we can satisfy you.

We certainly appreciate the support given us and thank you sincerely for past orders, and hope that we will have the pleasure of serving you again this year.

Routledge Seed & Floral Co.

OFFICE AND SALESROOM, 145-147 Second St., between Morrison and Alder
EAST SIDE STORE and CITY NURSERY DEPT., Corner East Oregon and Union Ave.

U. S. PARCEL POST RATES AND REGULATIONS

BY PARCEL POST.—We do a direct mail order business with our customers. This enables us to give you direct and personal attention, quick service and lower prices.

Size and Weight of Parcel Post Packages

Packages cannot be sent that measure over 84 inches in length and girth combined. The weight limit for the local, first, second and third zones is 70 pounds. The weight limit for the third to eighth zones is 50 lbs., except as follows:

ALASKA, MEXICO, CUBA, HAWAII, PANAMA and the PHILIPPINES take the 8th zone rate with a WEIGHT LIMIT OF 20 LBS. We do not pay postage in 7th and 8th zones.

CANADA takes the EIGHTH zone rate with a WEIGHT LIMIT OF 4 LBS. 6 OZS.

Zones

Postage Rates

First and second zone....	50 to 150 miles, first lb.	5c; each additional lb. or fraction	1c
Third zone.....	150 to 300 miles, first lb.	6c; each additional lb. or fraction	2c
Fourth zone.....	300 to 600 miles, first lb.	7c; each additional lb. or fraction	4c
Fifth zone.....	600 to 1,000 miles, first lb.	8c; each additional lb. or fraction	6c
Sixth zone.....	1,000 to 1,400 miles, first lb.	9c; each additional lb. or fraction	8c
Seventh zone.....	1,400 to 1,800 miles, first lb.	11c; each additional lb. or fraction	10c
Eighth zone.....	all over 1,800 miles, first lb.	12c; each additional lb. or fraction	12c

War Postage Tax.—Add the war tax of 1c extra for each 25c or fraction thereof required to cover postage. Don't forget.

When you order by mail from Portland, look for the zone that corresponds to the number of miles you are away, consult the table above and add postage on stocks not postpaid by us.

ALL MISCELLANEOUS MERCHANDISE offered in this catalog **THAT CAN BE SENT BY PARCEL POST** is market P. P. and the **PACKED WEIGHT** is given so that extra money for **POSTAGE** can be remitted according to the table above, **OTHERWISE** we will send by freight or express. Read copy inside front cover.

Note.—B—Bulbs. P—Plants. R—Roots. F—Flowers

Note.—B—Bulbs. P—Plants. R—Roots. F—Flowers

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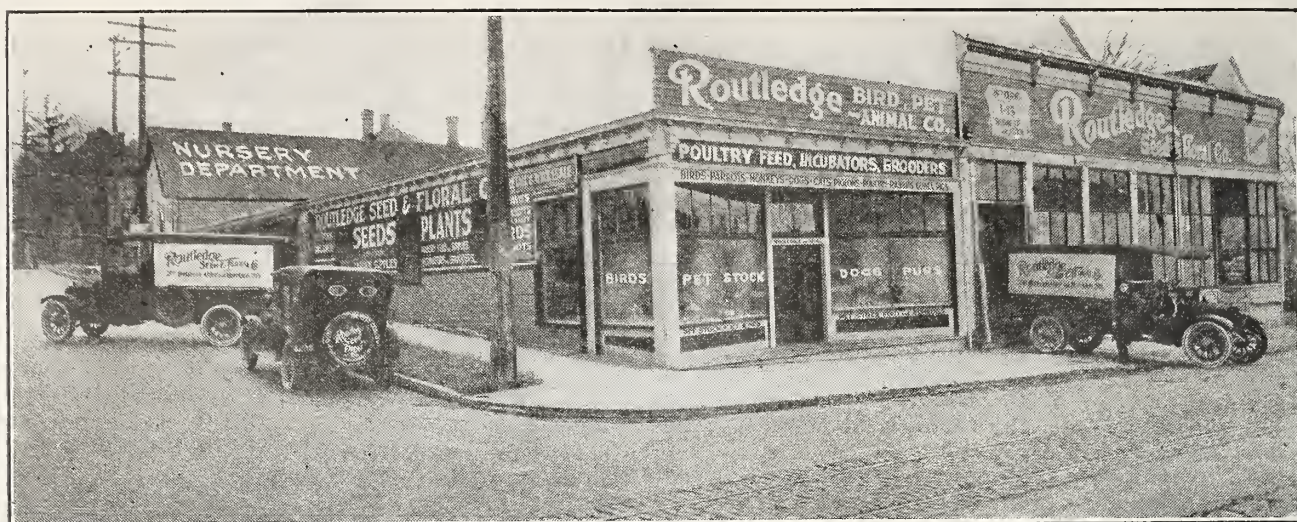
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Note.—B—Bulbs. P—Plants. R—Roots. F—Flowers

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OUR FALL CATALOG READY ABOUT SEPTEMBER 1ST

Our Fall Catalog of Flowering Bulbs, Hardy Plants and Shrubs, Rose Bushes, Fruit, Shade and Ornamental Trees, Shrubs and Vines is issued about September 1st each season. If you would like a copy, make your request at any time and we will put your name on the mailing list for catalog in season.



Our New East Side Store and Shipping Department

ROUTLEDGE BIRD, PET AND ANIMAL COMPANY

The illustration above shows the new East Side Store, where we will have ample space to keep larger stocks of Birds and Pets and have room for the manufacture and packing of our H. Q. line of Bird and Pet Remedies, Feeds, etc. Part of our City Nursery and Plant Department will also be conducted there.

The Pet Stock Department of our business has made such rapid growth and the demand for dependable Live Animals, Birds, Poultry and Baby Chicks, proper Foods, Remedies and Pet Stock Supplies is so great that we have incorporated the Routledge Bird, Pet and Animal Company.

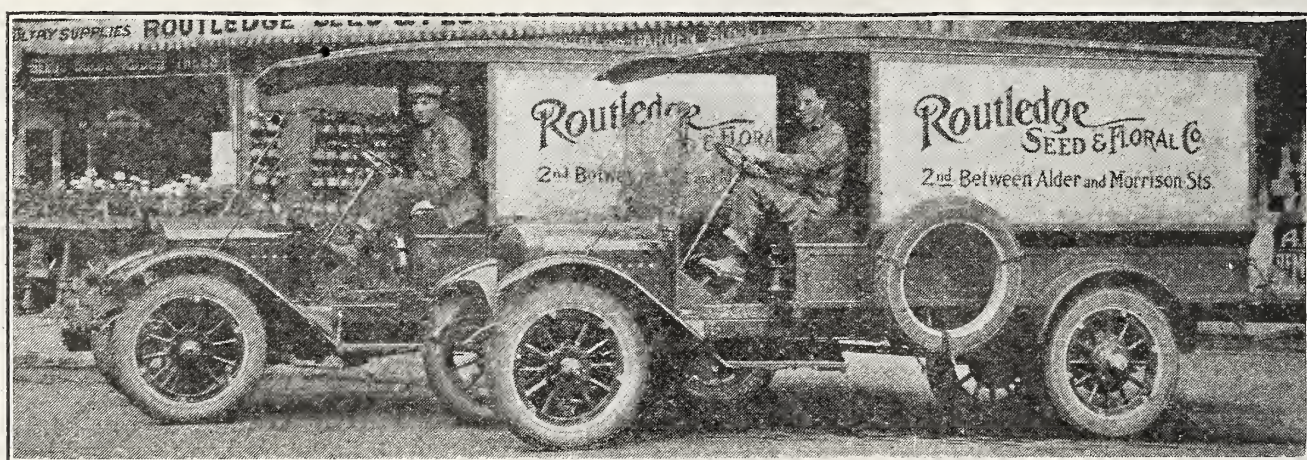
This Company will cater to the wholesale trade as well as the retail. Dealers throughout the Northwest can now be supplied with our "H. Q." stocks.

The new company will co-operate with the Routledge Seed & Floral Company, thereby enjoying the latter company's experience, facilities and organization. George L. Routledge will be in charge of the new store.

The new store will also stock Poultry Supplies of all kinds, Poultry Feeds and a general assortment of Garden Seeds and Supplies, Flower, Farm and Field Seeds.

ROUTLEDGE BIRD, PET AND ANIMAL COMPANY. PHONE EAST 2596

No. 174 Union Avenue North, corner Oregon. Just across the Steel or Railway Bridge



ROUTLEDGE SALES SERVICE DEPARTMENT

This department, working in full harmony with our buying, selling, wrapping and packing forces, follows and speeds up all orders taken through the many different departments, gives your order **personal** and **prompt** attention. It also handles all incoming local stocks, turning them to their respective departments, avoiding delay, as is many times the case with concerns not equipped with the facilities such as this department boasts. Our heavy trucks for incoming and outgoing carload shipments and auto truck deliveries on the main highways cut of Portland, of course, work in conjunction with this department, under the management of a competent manager who has much experience in this work.

Out-of-town orders are dispatched to postoffice or freight sheds twice daily, same with express orders. This gives you a next-day delivery, providing, of course, that your order is for immediate shipment and for seasonable stocks.

Our city deliveries are handled by efficient drivers in charge of G. M. C. trucks that excel for service.

Courteous treatment, Highest Quality Stocks and prompt deliveries should convince you that we appreciate your patronage at all times.

ROUTLEDGE SEED & FLORAL COMPANY. PHONE MAIN 172

145-147 Second Street, Between Morrison and Alder

ARTICHOKE

LARGE GREEN GLOBE.—The well-known French vegetable; the undeveloped flower heads, when properly prepared, make a most delicious dish. Pkt. 15c; oz. \$1.25

White Jerusalem.—Tubers grown for stock. See page 43.

ASPARAGUS

COLUMBIAN MAMMOTH WHITE.—Gives immense yield of large, clear, white shoots; very tender and of excellent flavor.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.25

PALMETTO.—Early, prolific; large, thick, dark-green shoots. Popular commercial variety.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.25

CONOBER'S COLOSSAL.—A good, standard large sort of approved quality. Shoots bright green, very tender.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.25

ASPARAGUS ROOTS.

You can save two or three years' time by buying Asparagus Roots. For prices, see Vegetable Roots, page 115.



Asparagus Tips

GARDEN BEANS

DWARF OR BUSH GREEN PODDED KINDS

Packet and single pound prices only are prepaid. Add postage to 10-lb. prices if wanted by mail.

STRINGLESS GREEN POD

This famous Bean is unequalled as a first-early; also for main crop.

It combines unusual hardiness, extreme earliness, and wonderful productiveness with handsome appearance and finest quality of pods.

By repeated plantings pods may be had in constant succession from spring until cut off by heavy frosts in the fall. The pods are of the finest quality, of a rich green, very round and almost straight, long, solidly meaty and plump. The pods are tender, brittle, and of finest flavor, always entirely stringless even when fully grown.

Large pkt. 15c; 1/2 lb. 25c; lb. 40c; 10 lbs. \$2.75.

LONGFELLOW—NEW

Longfellow is an extra early green podded snap bean, producing splendid crops of very long, round, straight, solid, fleshy pods, which are deliciously tender and brittle. The flavor is excellent. The plants are robust and very productive. Try this variety.



Longfellow—New

Pkt. 15c; 1/2 lb. 25c; lb. 40c; 10 lbs. \$3.00

DWARF HORTICULTURAL

One of the best dwarf sorts for green shell beans for the home garden and market and can be used early as a green podded snap bean. The plants are very productive, pods broad and thick, with splashes of bright red on a yellowish ground. They become fit as green shelled beans early; are very large, easily shelled and are about equal to the Lima in quality. Excellent for canning. Our stock is true, all dwarf and unsurpassed.

Large pkt. 15c; 1/2 lb. 25c; lb. 40c; 10 lbs. \$2.75

EXTRA EARLY REFUGEE

Very hardy and extremely productive. Pods round and straight, tender and of excellent quality. Excellent as a snap bean and always in demand as a pickling and canning variety.

Large pkt. 15c; 1/2 lb. 25c; lb. 40c; 10 lbs. \$2.75

Market and Truck Gardeners should write us for special prices and state quality and kinds wanted. We'll save you money and you will get "Highest Quality" Seeds.

INOCULATE THIS
SEED WITH
MULFORD CULTURE

Beans — Continued

INOCULATE THIS
SEED WITH
MULFORD CULTURE

DWARF OR BUSH—YELLOW PODDED

PROLIFIC BLACK WAX

The earliest wax variety. Pods a rich, creamy yellow, round, fleshy, tender, stringless and remain in fit condition for some time. Enormously productive and of fine quality, and one of the most reliable early sorts for general use.

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$2.50

IMPROVED GOLDEN WAX

Medium early, heavy cropper, vine vigorous. May be sown early or late with the assurance of a good crop. Pods are golden yellow, fleshy and solid, brittle, waxy texture and have an exceptionally rich buttery flavor. Excellent for home or market garden.

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$2.75



Davis Wax

Packet and single pound prices are prepaid. Add postage to 10-lb. prices if wanted by mail.



Prolific Black Wax

PENCIL POD BLACK WAX

Early and Stringless

The dwarf, bushy plants produce in profusion; beautiful, long, straight yellow pods that are well rounded, deeply "saddle backed," very meaty and solid. Rich and mild in flavor and entirely stringless.

Pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$3.00

DAVIS KIDNEY WAX (See Cut)

The most hardy and productive wax bean. The pods are long, white, straight, crisp and tender. The vine is rustless and very vigorous, bearing the pods in clusters. For canning this is unexcelled on account of purity of the pod and bean. It is a remarkably good variety for shipping; seed white, and on this account it is desirable for a shelled bean in winter.

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$3.00

NEW BRITTLE WAX

Extremely early and of such superb quality it might almost be called "Best of All." The plants are of vigorous growth, with large foliage, and appear completely loaded with handsome pods, which are nearly straight and very long. They are broad, fleshy, tender, "brittle" and entirely stringless at all stages of growth. The pods are unexcelled as snap-shorts. Seed white, showing only a small dark dot at the eye; any surplus allowed to ripen will be readily salable as winter shell beans.

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$3.25

WARDWELL'S KIDNEY WAX

A popular and well-known variety; pods long, golden-yellow, brittle and stringless; seed white, with dark markings about the eye. Market gardeners find this bean one of the most profitable.

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$2.75

USE BUG DEATH APHIS

On bean plants to kill aphids and beetles. Also revives and aids production. Page 121.

CLIMBING POLE BEANS

Packet and Single Pound ONLY are postpaid. Add postage if wanted in 10-lb. lots or by mail.

Routledge Giant

This grand bean of unknown origin has several names, "Dickenson's Yount," "Oregon Giant," etc. Although the pods are often 9 to 10 inches long, plump and meaty, they are stringless, brittle and tender—the flavor and quality when cooked is mild and delicious. Excellent for table or canning green and as a salad bean whole or sliced and served with dressing, it is delightful, a rare treat. Pods show some carmine stripes which disappear when cooked. While it produces wonderfully from early until frosts, it is a "shy seeder" and seed is always high priced and scarce.

3-oz. pkts. 25c; ½ lb. 50c;

Improved Kentucky Wonder (Asparagus)

A very popular variety; often sold as asparagus. More extensively planted than any other. Pods green, very long, round and perfectly stringless. Enormously productive and early, remaining in "fit" condition a long time. Unsurpassed for the table, being very tender and of delicious flavor.

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$3.00

Routledge Perfection "White Seeded" Pole Bean

It produces large, quick growing vines which soon cover the poles, bearing a very heavy crop of handsome green pods about 8 inches in length which are very meaty, stringless and of delicious flavor. The vines produce their pods very early and continue to bear immense quantities of snap pods throughout the season. Excellent for canning. The dry beans being white and of good size when allowed to ripen on the vines, make it an excellent soup or bake bean for winter use.

Large pkt. 15c; ½ lb. 30c; lb. 50c

Kentucky Wonder Wax

The best wax podded pole bean. Very similar to the green podded Kentucky Wonder but the pods are a little broader. They are very fleshy and stringless as snaps and are of excellent quality. The pods are very long, handsome light yellow. Seed medium sized, oval, flattened, very irregular, usually somewhat shriveled, dark brown. Its earliness and hardness commend this as a pole bean well adapted for Northwestern latitudes.

Large pkt. 15c; ½ lb. 30c; lb. 45c; 10 lbs. \$3.50

Harlequin—New

The finest pole horticultural variety in cultivation and on account of its wonderful productiveness and superior quality takes first rank as a late Shell Bean. Pods extra long, 6 to 7 inches, brilliantly colored with crimson carmine borne in clusters. Unequaled for tenderness and delicious flavor.

Large pkt. 15c; ½ lb. 25c; lb. 45c; 10 lbs. \$3.75

Lazy Wife

One of the best of the late green podded pole beans for snap or green shell use. The medium green pods, borne in large clusters, are five to six inches long, broad, thick, fleshy and entirely stringless. When young they have a rich, buttery flavor which is retained until they are nearly ripe. The seed is white, medium size, slightly oval or nearly round.

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$3.00

Horticultural Pole

Speckled Cranberry or Wren's Egg.—Vines vigorous, quite early. Pods short, broad, green streaked with bright red. Beans are round, splashed and spotted with red. Of fine quality, either as a green shelled bean or dry for winter use.

Large pkt. 15c; ½ lb. 25c; lb. 35c; 10 lbs. \$2.75

Scarlet Runner

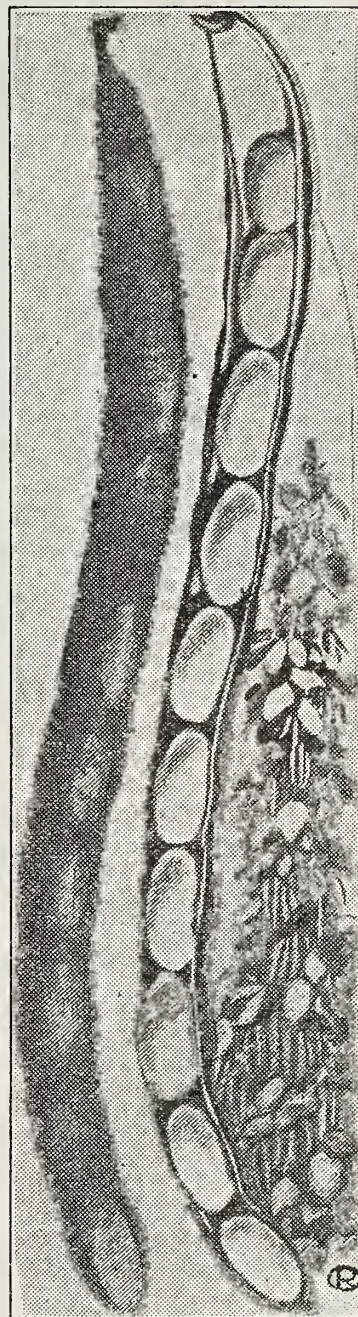
Grown extensively for ornamental purposes, as flowers are a most brilliant scarlet and borne profusely; beans are broad and flat, and of fine flavor when cooked, same as Lima beans.

Large pkt. 15c; ½ lb. 25c; lb. 40c

BUG DEATH APHIS

For Bean Insects.

See page 121



Kentucky Wonder Asparagus

Molalla, Ore., Feb. 22, 1921.

Routledge Seed & Floral Co.

Dear Sirs: I was very much pleased with the garden seed I ordered from your company last year. You can't keep the seed in the ground, it will come up. I am getting all my seed from you this year.

Yours truly,

MRS. C. W. AUSTIN.

Yamhill, Ore., May 19, 1921.

Routledge Seed & Floral Co.

Gentlemen: The Duke's Delight Peas I purchased from you last year were the best peas I ever ate, and have planted them again this year. The Dwarf Horticultural Bean was true to name, not a runner on them and much less trouble and just as prolific as the pole bean of the same name.

Yours very truly,

MRS. J. E. WILLITS.

Although pole beans require a little more care and labor, they are, when properly grown, usually of longer bearing period than the dwarf sorts and are much more productive.

BEANS — Continued



Routledge Early Prize Pole Lima

Routledge Early Prize Pole Lima

By careful selection we now offer a strain that is much earlier than "Oregon." It will actually mature a full crop of dry beans in the early fall. The vines are vigorous and remarkably productive. The green shell beans are large, very tender and of finest quality. It has the rich, buttery flavor, always desired but seldom found.

Large pkt. 20c; 1/2 lb. 30c; lb. 50c

Oregon Pole Lima

Excellent for the Northwest. Strong, vigorous grower. In July the blooms come in long panicles from the top shoots and the large, broad pods are freely produced until

frost. The large, plump, white beans are of delicious quality, green, shelled or dry. They are in "prime condition" when the pods begin to turn yellow. Oregon grown, acclimated seed.

Large pkt. 15c; 1/2 lb. 25c; lb. 35c; 10 lbs. \$3.00

DWARF OR BUSH LIMA

BURPEE'S IMPROVED BUSH LIMA.—Best of the Bush Lima type. Very large, broad pods, excellent flavored beans, borne on large, vigorous plants. Extremely prolific. Pods contain from four to six very large beans of greenish white color.

Pkt. 15c; 1/2 lb. 25c; lb. 45c; 10 lbs. \$4.00

Commercial Dry Table Beans

The stocks we offer are of known varieties, acclimated and hand-picked and grown especially for seed—by far the safest, best and most profitable in the end.

Improved Tree Bean

Early, Wonderful, Productive

On account of its snowy whiteness and uniformly small size, it commands the highest price in all markets. The plants grow upright, have less foliage than most varieties and hold the pods well up from the ground, thus keeping the beans from getting dirty and discolored. The pods are very freely produced, are long and well-filled. The dry bean is small, white, plump and almost round. Cooking and eating qualities are unsurpassed. The whole crop will ripen early and evenly and you can get it safely harvested before the rainy season sets in. Our stock of this particular strain is rather limited, so order early.

Prices: Large pkt. 15c; lb. 30c; 10 lbs. \$2.00. Write for quantity price.

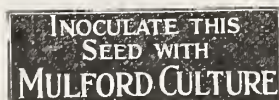
LADY WASHINGTON.—A great improvement over the old "White Navy," as it is much earlier; especially adapted to Western conditions.

Large pkt. 15c; lb. 30c; 10 lbs. \$2.00

BOSTON YELLOW EYE.—For cooking in a dry state they have no equal. The dry bean is almost round, plump and of a beautiful light-brown with a yellow eye.

Large pkt. 15c; lb. 30c; 10 lbs. \$2.00

To insure the greatest success



See page 41.

BROWN SWEDISH.—Dry beans, rather small, round, oblong, golden brown with a white eye. As a cooking or baking bean the quality is very superior, having a richness and flavor all its own. It is unusually productive, pods long and straight and always well filled. Bush strong, healthy and vigorous. Crop matures early.

Pkt. 15c; lb. 25c; 10 lbs. \$2.00

RED MEXICAN.—An excellent dry bean for winter use. Used extensively for baking and Spanish dishes.

Large pkt. 15c; lb. 25c; 10 lbs. \$2.00

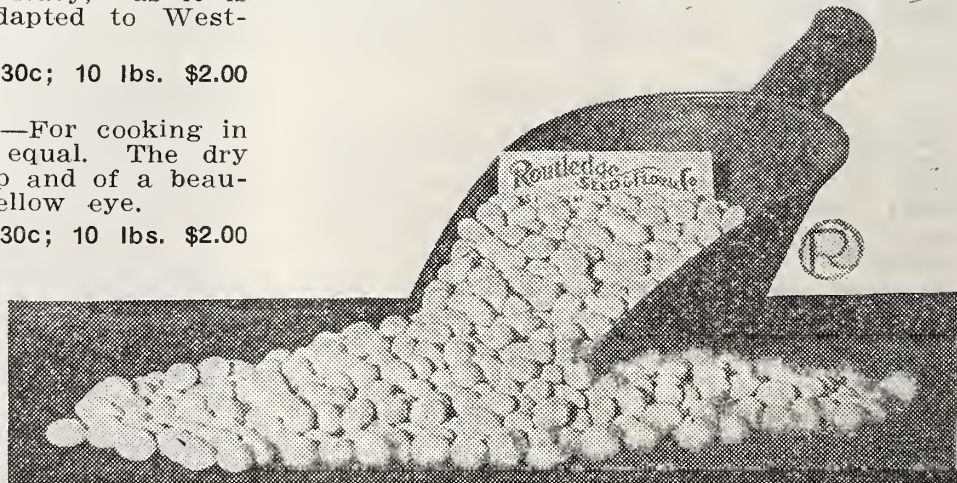
BROAD WINDSOR.—An English variety; large, broad, flat beans of delicious flavor; used as a shell bean. Good for hog pasture; very hardy.

Large pkt. 15c; lb. 30c; 10 lbs. \$2.50

Castor Bean

Used for medicinal purposes and by some claimed to keep moles away. Ornamental foliage, 4 ft.

Large pkt. 15c; lb. 60c



Improved Tree Beans

Write for low prices by the hundred lbs. For seed tables, quantity per acre, see inside back cover.

TABLE BEETS

Routledge Favorite

The best of all for home gardens. A re-selected strain of Crimson Globe. Perfectly globe shaped, with a single tap root, and of the richest color of any of the beets. It is early and a splendid keeper, is not excelled in yielding qualities, is exceedingly tender, fine and sweet and is unequalled for table use. Market gardeners will find our Favorite very profitable as no other sort approaches it in attractiveness or quality.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$2.00

Crosby's Egyptian

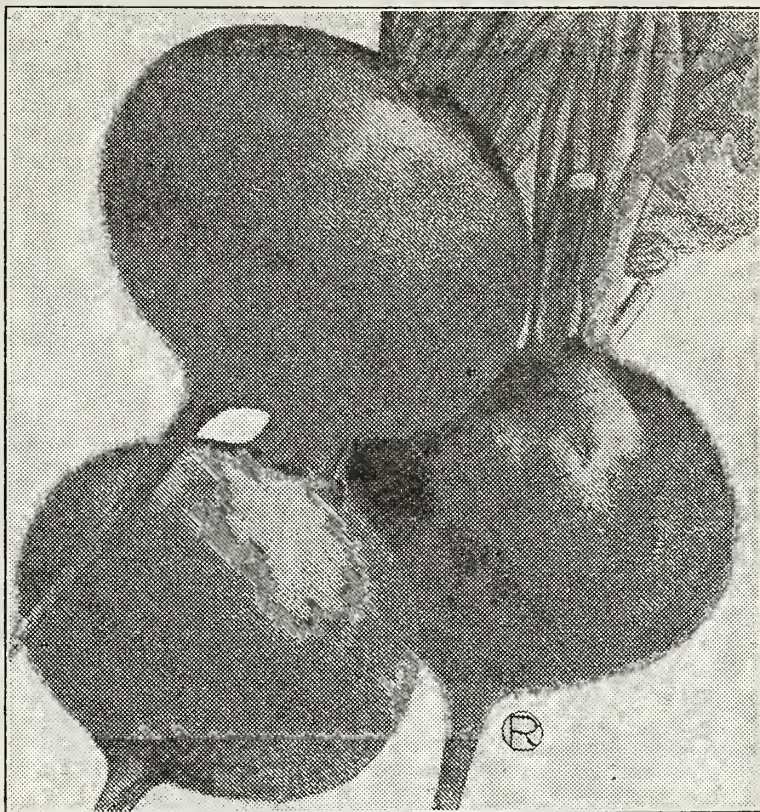
Very popular, extremely early beet, as it reaches the desired size quickly. The beets are of good size, rather flat than round, flesh rich vermilion red, very attractive.

Pkt. 10c; oz. 15c; 4 oz. 45c; lb. \$1.25

Detroit Dark Red

Excellent variety, nearly globular, dark skin and rich red flesh, maturing early and keeping crisp and tender for a long time. Very popular with market gardeners.

Pkt. 10c; oz. 15c; 4 oz. 45c; lb. \$1.25



Routledge Favorite

Improved Early Blood Turnip

This is the ideal beet for market gardeners. It is very symmetrical, with small tap root and but few fibrous roots; color outside is deep blood-red; fine grained and unsurpassed in quality. It continues to grow until late in the fall, attaining a large size and making a good selling and eating beet for winter.

Pkt. 10c; oz. 15c; 4 oz. 40c; lb. \$1.00



Brussels Sprouts

Swiss Chard

Luccullus "Spinach Beet"

This does not make edible roots like the regular garden beets, but is grown for the broad white leaf-stalks, which are bunched and cooked in the same manner as asparagus. The young leaves may be gathered also and cooked like spinach. Makes a delicious summer vegetable.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$2.00

EDMAND'S BLOOD TURNIP

Unsurpassed for late planting; deep blood-red flesh, very tender and juicy, runs very evenly in size and quite round; grows a small top.

Pkt. 10c; oz. 15c; 4 oz. 50c; lb. \$1.25

HALF LONG BLOOD.—Quite popular. Excellent in shape and quality; yields well.

Pkt. 5c; oz. 15c; 4 oz. 50c; lb. \$1.25

LONG BLOOD.—The root is smooth and handsome, flesh brilliant in color and excellent quality. Good keeper.

Pkt. 5c; oz. 15c; 4 oz. 50c; lb. \$1.25

BRUSSELS SPROUTS

The plants, which are very hardy, grow two or three feet high, and produce, from the sides of the stalks, numerous little sprouts, which resemble very small cabbages one or two inches in diameter. The leaves should be broken down in the fall, to give the little heads more room to grow. Grow and set out same as cabbage or kale, 2½ to 3 ft. apart.

PERFECTION OR DALKEITH.—Plants are of dwarf growth and stems are thickly set with large, solid sprouts. This variety is very hardy and even during quite severe weather the plants maintain their sprouts; in fact, the flavor and quality is much improved by frost. Pkt. 10c; oz. 40c; 4 oz. \$1.00

CHIVES.—See Vegetable Roots, page 37.

Stock Beets or Mangels

Excellent winter feed for horses, cattle, sheep, hogs and chickens. Farmers and stock raisers of the United States do not appreciate so fully the value of Mangels for feeding cattle, hogs, sheep, etc., as do the farmers of Europe. In France, Great Britain and other European countries, it is the exception rather than the rule where Mangels are not grown on a large scale on every farm. The immense yield which may be secured from an acre, with very little expense either for material or labor, makes the Mangel crop one of the most profitable on the farm. Fifteen to 20 tons of roots an acre is not an unusual yield; some specimens weigh 20 to 30 lbs. each. Where properly cultivated, seeded and harvested the cost of growing a bushel should not exceed 10c. When fed in combination with grain they are worth almost as much, pound for pound, as the grain. This statement may seem absurd, but experience has proved that Mangels so aid digestion and assimilation by keeping the animals in a healthy condition, that they increase the feeding value of other feeds consumed, beside the nutrients the roots contain. Every farmer and poultryman should raise Mangels.

NOTE.—In 10-lb. lots, 10c per lb. less; write for quantity prices.

Giant Yellow Eckendorf

A new mangel of great merit. The roots are smooth, long and cylindrical in shape, very heavy, weighing up to 15 and 20 pounds each; grow two-thirds above ground. The flesh is firm, crisp and solid, white in color and of high feeding value. (See cut No. 1.)

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 65c

Giant Half Sugar Mangel

Yields as much per acre as the best Mangels, and twice as much per acre (bulk of roots), as the rich sugar beet. Roots grow very large above the ground. Smooth, creamy white in color and very nutritious. Easily pulled. (See illustration No. 1.)

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 65c

Mammoth Long Red

Very popular and much used. A large and heavy cropper. Dark red skin, with whitish flesh; grows one-half or more above the ground; roots quite regular; attain a very large size. (Same shape as No. 2.)

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 65c

Danish Sludstrup

An improved variety, considered one of the best. Awarded first class certificate. Color, reddish yellow, and of a distinct type. It is very hardy, grows well above ground; is easily pulled; very nutritious. (See cut No. 2.)

Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 65c

Golden Tankard

An enormous yielder of weight per acre, and at the same time very nutritious; flesh deep-yellow, of fine shape, growing largely above ground, thus being easily harvested. (Same shape as cut No. 3.)

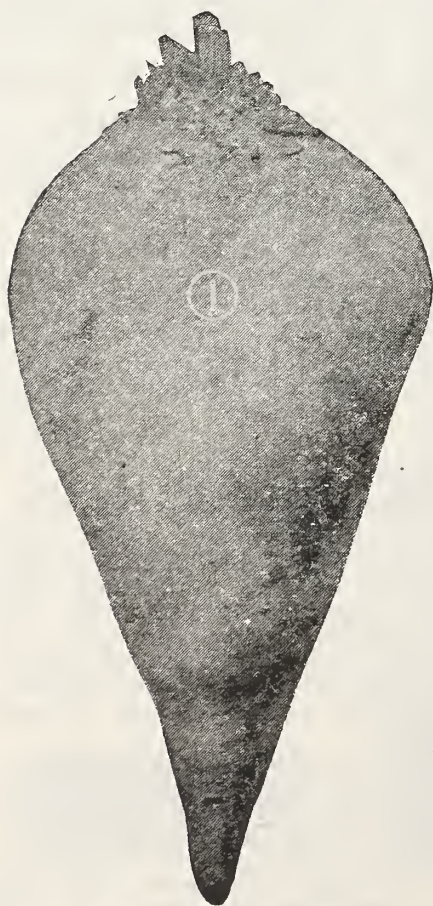
Pkt. 5c; oz. 10c; 4 oz. 25c; lb. 75c

SUGAR BEETS

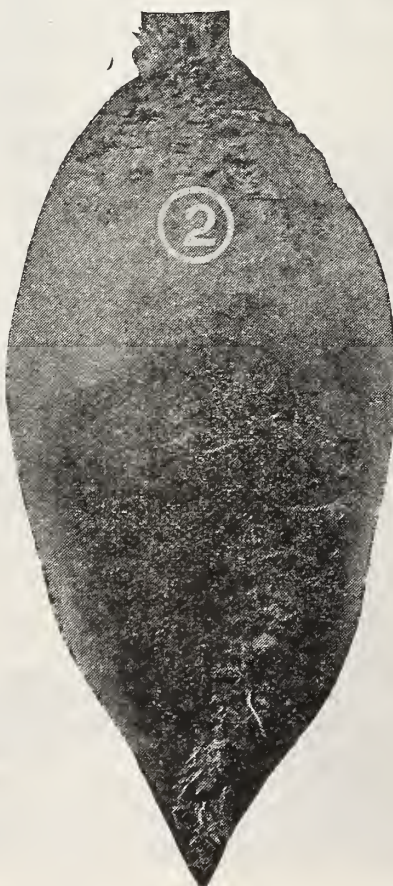
Pkt. 10c; oz. 15c; 4 oz. 40c; lb. \$1.00

FRENCH WHITE SUGAR.—The sugar beet most generally grown for stock, as it combines with heavy yield, from 10 to 13 per cent of sugar.

KLEIN WANZLEBEN.—The most popular for table and for sugar production. Tops rather large and slightly waved.



(1) Giant Half Sugar



(2) Danish Sludstrup



(3) Giant Yellow Eckendorf

BROCCOLI — Winter Cauliflower

Forms a head like cauliflower, but is much hardier; stands wet and cold better and gives excellent results. For fall use sow White French in March or April; St. Valentine in May or June, for late winter and early spring cutting. St. Valentine is very extensively planted by our local market gardeners for use in late winter and spring when cauliflower is out of season. Plant and cultivate same as cauliflower.

Routledge "H. Q."

(Highest Quality)

ST. VALENTINE

In this seed we are offering our customers a very select, high-grade strain of the well-known St. Valentine. By selecting only the most perfect heads, those showing the most desirable leaf formation for the protection of the developing head and those of large size and perfect, compact heads, free from small center-head leaflets, we have produced this superb strain. Our H. Q. St. Valentine produces larger, later and far better heads that are much superior to those produced from the average seed sold of this variety. Our "H. Q." seed will produce the highest per cent of perfect heads and bring the "top" price.

The H. Q. St. Valentine seed we are offering this year is from just such perfect heads as shown herewith. It comes from the originators of this now famous variety. Our seed stock is quite limited, so order early.

H. Q., pkt. 15c; $\frac{1}{4}$ oz. 50c; oz. \$1.50; 4 oz. \$5.00.



"H. Q." St. Valentine Broccoli

NOTE.—Don't set plants of St. Valentine out before June—and set at least four feet apart each way. They will be ready to cut early the following spring.

White French Broccoli

A select early strain, producing fine white heads of large size and excellent quality. Broccoli is hardier and easier to grow than cauliflower, and this variety comes into head and can be cut in the fall and winter, depending on earliness of planting.

Pkt. 10c; oz. 85c; 4 oz. \$3.00

NOTE.—These illustrations reproduced from photographs show our "H. Q." type of a perfect cut head, also a growing plant with the large incurving leaves that are so necessary to protect the "head" during cold, unfavorable winter weather.

Albany, Oregon.

Routledge Seed & Floral Co.

Sirs: The Broccoli seed I got from you last year was fine. Sold \$43.00 from a small patch.

Yours truly,

A. B. CUSTER.



H. Q. type of matured head

FREE BULLETINS AND PAMPHLETS on general gardening and many special crops, also spraying, etc., are issued by the Oregon Agricultural College at Corvallis, Ore. These are sent free on request. We advise our customers to secure them. **THEY ARE OF GREAT VALUE.**

"Highest Quality" CABBAGE True and Pure

Our Cabbage Seeds come from the world's best growers—pure, true strains, of highest quality. One ounce will produce over 3,000 plants. One-quarter pound of seed will produce plants sufficient for one acre, therefore, don't practice false economy by buying cheap, low-quality seed. There is a great amount of inferior, poorly grown, mixed cabbage seed on the market this year. Beware of low prices.

Early Jersey Wakefield

The earliest and hardiest heading of first early cabbages. Most gardeners depend upon it for the bulk of their extra early crop. Its exceeding hardiness not only to resist cold, but other unfavorable conditions, insures the greatest likelihood of profitable and satisfactory results. Our stock is grown and selected with the greatest care; there is none better, and few as good. Head conical, very compact, solid and of excellent quality. The thick, stout leaves and compact habit makes it the best sort for very early setting. **HIGHEST QUALITY SEED.**

Pkt. 10c; oz. 40c; 4 oz. \$1.25; lb. \$3.50

R. S. & F. Co.'s Oregon Wakefield

A larger, most remarkable and valuable strain of Wakefield. It has the same general characteristics of other Wakefield cabbages, the heads being conical with a rounded or blunt point. It is, however, far superior to other strains, being nearly double the size and of better quality, and at the same time is almost as early. It has few outer leaves, permitting close planting.

Pkt. 10c; oz. 40c; 4 oz. \$1.25; lb. \$3.50

EARLY WINNINGSTADT

One of the best for general use, being very hardy, sweet, fine quality, and sure to head. Head regular, conical, very hard and keeps well both summer and winter. It is the hardiest, not only as regards frost, but will suffer less from excessive wet, drought, insects or disease than any other second early sort.

Pkt. 10c; oz. 40c; 4 oz. \$1.25; lb. \$3.50

Use a Little "Pep"

Mix a handful of "Wonder" Fertilizer in the soil under each cabbage and watch it grow. See page 38.



Early Jersey Wakefield

Copenhagen Market

The earliest large round-headed cabbage yet introduced. Sure to head and every head perfect. The plant is of vigorous habit but compact, with short stem and few outer leaves which are of rather upright growth. The leaves are medium light green, nearly round, comparatively thick and smooth. The heads are round, very solid and of exceptionally good quality. Its earliness, compact growth, uniformity and size of head, firmness and most excellent quality combine to make Copenhagen Market the most valuable cabbage of recent introduction. We recommend it unreservedly. Worth the additional price.

Pkt. 10c; oz. 50c; 4 oz. \$1.50; lb. \$5.00



Use Mag-o-tite when planting cabbage, kale, broccoli, cauliflower, radish, turnip, onions or root crops to prevent their injury or destruction by root maggots or grub worms.

Sure preventive; non-injurious; a stimulant. See page 121.

CABBAGE — Continued — Late Varieties

Danish Round Head

An earlier short-stemmed strain of the famous Danish Ball Head

Large and very solid round head on short stems, having the same keeping quality as the original strain of Danish Ball Head, so widely known. It is 10 days to 2 weeks earlier and produces larger yields. It is especially valuable for high, dry land, producing good sized heads where other strains would be too small. For shipping in the late fall or winter there is no finer cabbage. Our seed of Danish Round Head comes direct from the originator in Denmark and is of the Highest Quality.

Pkt. 10c; oz. 50c; 4 oz. \$1.50; lb. \$5.00

Premium Late Flat Dutch

A low growing variety; heads large, bluish-green; round, solid, broad and flat on top; an excellent fall and winter variety, and a good keeper. It is a sure header. Our stock has been grown from carefully selected heads, and we consider it superior to any other strain of Flat Dutch cabbage on the market.

Pkt. 10c; oz. 40c; 4 oz. \$1.25; lb. \$4.00.

Perfection Drumhead Savoy

A variety that is much prized by those who are familiar with it. It is very sweet and crisp, and always tender. Heads medium size and compact, with densely and uniformly crimped or savoy leaves.

Pkt. 10c; oz. 50c; 4 oz. \$1.50; lb. \$5.00.

Mammoth Rock Red

Best hard-headed, red variety; large heads, globular, and very deep red on top. Very tender and excellent quality, fine for cold salads on account of its attractive color.

Pkt. 10c; oz. 50c; 4 oz. \$1.50

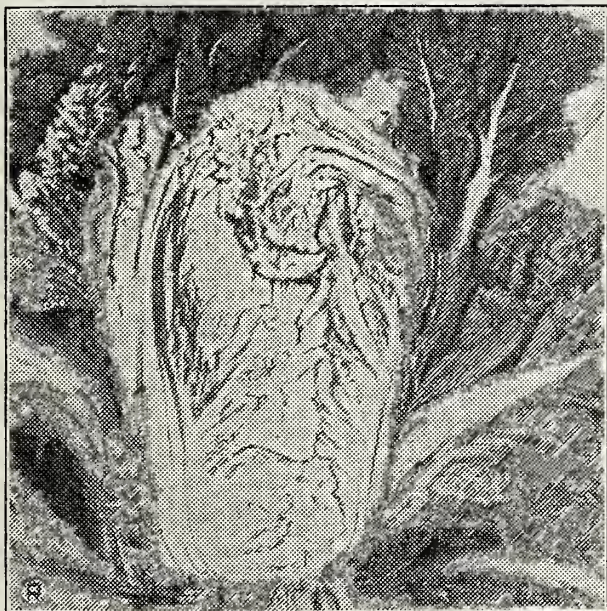


Danish Ball Head or Hollander

Danish Ball Head—True, Highest Quality Seed

Most remarkable late cabbage yet produced, heads hard and solid—fine grained and tender. Entirely distinct. Exceedingly hardy in resisting cold and wet weather. We offer true, pure seed of the very finest medium short stemmed type. Famous for its hard-heading qualities, which at once recommends it as highly valuable for shipping. The magnificent heads are round in form and keep in excellent condition during winter, coming out in the spring perfectly solid.

Pkt. 10c; oz. 50c; 4 oz. \$1.50; lb. \$5.00



Wong Bok

WONG BOK

This Chinese Cabbage is becoming more popular each year. While it has been cultivated in China for years, it is comparatively unknown in many markets. Last season there was more than usual displayed on our "Public Market." Some gardeners had it marked Chinese Cabbage, also Sweet Lettuce, Salad Lettuce, etc.

Wong Bok produces a beautiful, crisp, blanched tall or long head, resembling a giant Cos Lettuce. As a salad it rivals the finest lettuce. Delicious sliced as cold-slaw. Boiled or steamed it makes delightful greens, more mild than cabbage, somewhat like brussels sprouts. Don't plant too early, grow it as a fall vegetable.

Plant like late cabbage, about 15 inches apart, in rows. Does its best in cool, moist weather. Will last until freezing weather.

Pkt. 10c; oz. 40c

DO YOU SEND EAST for your Seeds? Coast. Here's where you sell your products.

It's bad policy. Spend your money on this Our Seeds are highest quality.

CARROTS

ROUTLEDGE MODEL—CORELESS

The finest early table variety grown. Handsome, meltingly tender and sweet.

This new carrot is our own strain, grown from the French carrot, Nantes. You will be delighted with the melting tenderness and sweet, mild flavor of Routledge Model.

It is a half-long cylindrical carrot, blunt pointed, with a small tap root and small top. They run very uniform in shape and grow just the right size for table use. The flesh is of fine texture, entirely devoid of stringiness, coarseness and woody heart; color orange-scarlet, very attractive when served.

Pkt. 10c; oz. 25c; 4 oz. 60c; lb. \$2.00

Sisson, Calif., Feb. 25, 1921.

Routledge Seed & Floral Co.

Dear Sirs: I won two blue ribbons at the County Fair this year from vegetables raised from your seed—Carrots and Turnips, and if I had remembered to cover my Cauliflower one cold night, I would have won on it as it was the finest in the county, but I did not enter it as it was browned by the freeze, but such lovely large white heads I had to use all fall.

Yours truly,
MRS. H. J. DEETZ.

Early Scarlet Horn

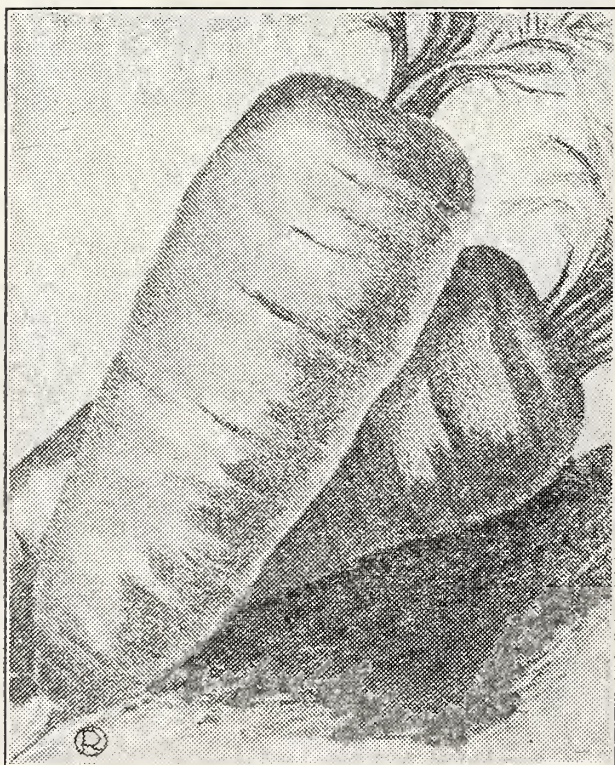
May be planted very early in spring, and is an excellent summer variety. Tops small and roots grow about 3 inches long, red-dish-orange and good flavor.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

Chantenay

The Market Gardener's Favorite. — Tops medium sized, necks small, roots tapering slightly, but uniformly stump-rooted and smooth; color deep orange-red; flesh very crisp and tender; medium early; a heavy cropper.

Pkt. 10c; oz. 20c; 4 oz. 40c; lb. \$1.25



Chantenay



Routledge Model—Coreless

ROUTLEDGE MAMMOTH, next page

Danver's Half-Long

A great favorite; big cropper; the roots are smooth and handsome, medium size, tapering uniformly to a blunt point and of a rich, dark orange; fine for table. On account of its productiveness it is a profitable variety to grow for stock feeding.

Pkt. 5c; oz. 15c; 4 oz. 45c; lb. \$1.10

Long Orange Improved

The best of the long carrots, especially for stock; color bright-orange, with long, tapering roots, requiring a deep soil.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.00

Guerande, or Oxheart

Bright orange, broad at the top and terminates abruptly in a small tap root. Length about 4 to 5 inches; excellent for shallow soils.

Pkt. 5c; oz. 20c; 4 oz. 40c; lb. \$1.10

Large White Belgian

Extensively grown for stock feeding; roots white; green above ground and growing to a large size; flesh rather coarse. A good cropper.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.00

CARROTS — Continued

Routledge Mammoth Stock Carrot

The heaviest cropping carrot grown, yielding more tons to the acre than any other sort. The flesh is yellowish-white, crisp and solid, and very sweet in flavor. It is a vast improvement on the Belgian sorts, which have been favorites in the past, as it is not only much more productive, but vastly easier to handle. The roots are short and very heavy at the shoulder, rendering them easily harvested. Too much can scarcely be said of their size and great productiveness. Every farmer should grow a good supply of carrots for winter feed and Routledge Mammoth is the kind to plant. Yields reported from 20 to 50 tons per acre.

Large pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50; 2 lbs., enough for one acre, \$2.50.

GARDEN GUIDE Worth Many dollars to any gardener. We think it the best book we have ever read. See Book List on page 128.



Routledge Mammoth

Highest
Quality

CELERY

Plants
Page 37

R. R.'S WHITE PLUME

Our Leading Early White Celery

A handsome, crisp sort, of very easy cultivation. Naturally its stalks and portions of inner leaves and heart are white, so that by tying or by simply drawing the soil up against the plant and pressing it together, the work of blanching is completed. It is the earliest celery known, delicious and fine flavored.

Pkt. 10c; oz. 35c; 4 oz. \$1.20

PARIS, GOLDEN SELF-BLANCHING

The finest strain of French grown seed. This splendid variety is without doubt the most popular celery grown. It is a self-blanching sort, for with a little banking or covering, even the outer ribs assume a beautiful golden-yellow, while the heart or vine stalks are deliciously tender, brittle and sweet. This variety is being very extensively grown on account of its ease of cultivation and superior quality. It is not quite so early as the White Plume.

Select quality: Pkt. 15c; 1/4 oz. 50c; oz. \$1.50; 4 oz. \$5.00.

Golden Yellow Self-Blanching

Same variety of celery as above, but is American grown. It is equal to most seeds offered, but not as true, dependable or of such high quality as the French grown stock.

Pkt. 10c; oz. 50c; 4 oz. \$1.50; lb. \$5.00

Giant Pascal

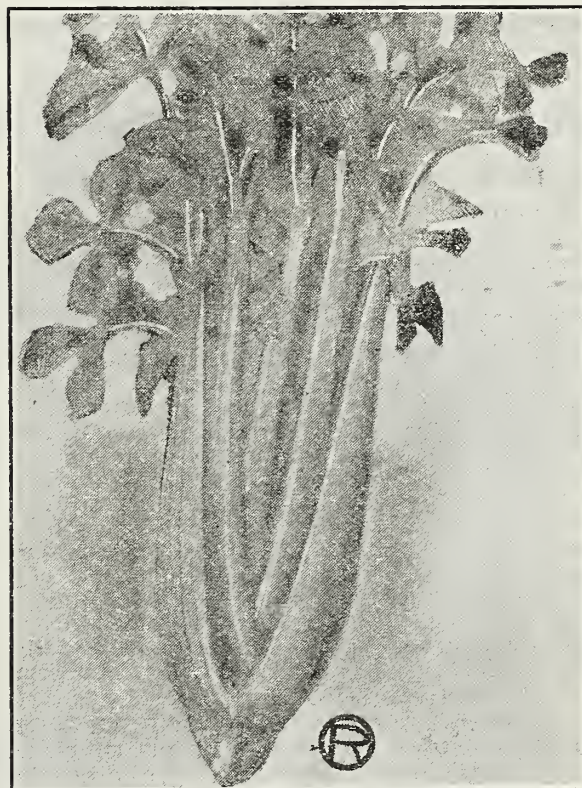
Excellent for fall or winter use, and has increased in popularity every year. A large, tall grower of the finest nut flavor, being free from any bitter taste. Very broad stalks, blanching very quickly with little banking up; an admirable keeper.

Pkt. 10c; oz. 35c; 4 oz. \$1.00

Winter Queen

One of the best winter varieties, and highly recommended. It is tall and forms a large bunch. The leaves are light-green.

Pkt. 5c; oz. 30c; 4 oz. 75c

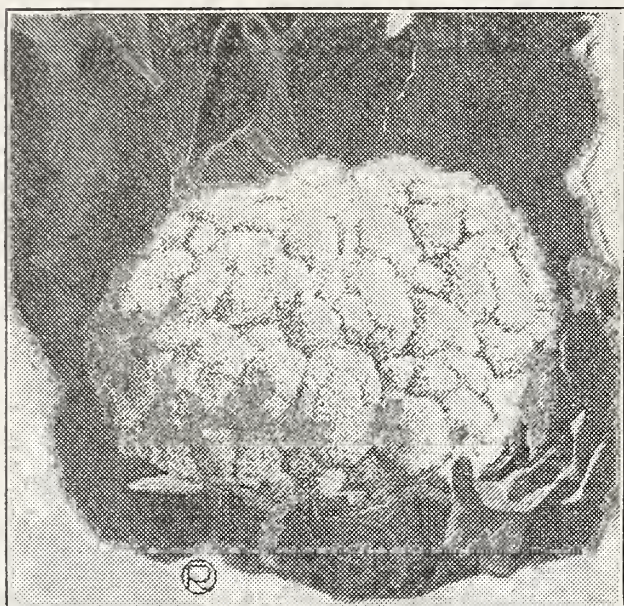


Paris Golden Self-Blanching

CELERIAC

Turnip Rooted Celery, see page 19.

"Highest Quality" CAULIFLOWER Plants, Page 37



Routledge Snow White

ROUTLEDGE "SNOW WHITE"

The Finest Cauliflower Grown

In competition with all other strains, this cauliflower has won the approval of critical gardeners, being early and also the **best main crop** sort grown. It is suitable not only for early use, but is superior for late planting. The heads are compact, firm and solid, and do not spread as do some of the inferior sorts. No other equals it in purity of color, being **clear snow white**. It is equally desirable for family use and for the market garden. The heads are large—from 9 to 12 inches in diameter. Very resisting against unfavorable seasons and dry weather, the foliage giving a splendid protection.

Pkt. 25c; ¼ oz. \$1.50; ½ oz. \$2.75; oz. \$5.00

EARLY SNOWBALL

This variety is much in demand by market gardeners. Its earliness, compact habit, large-sized heads and snow-white color recommend it to every grower as a variety of especial merit. We have an extra selected stock of this sort, and recommend it with the greatest confidence.

Pkt. 20c; ¼ oz. \$1.25; ½ oz. \$2.00; oz. \$3.50

NEW CALIFORNIA WONDER.—A late variety, forming good, large, solid heads during the winter. This variety has given great satisfaction in Oregon and California, wherever tried.

Pkt. 15c; ¼ oz. 50c; oz. \$1.50; ¼ lb. \$5.00

ALGIERS.—A very strong-growing late variety, with large leaves of a bluish cast. In cool locations and rich soil it produces very large, solid, white heads late in the fall.

Pkt. 15c; ¼ oz. 75c; oz. \$2.25; 4 oz. \$6.00

EXTRA EARLY SNOWBALL (Extra Selected).—This is the choicest selected strain of the popular Erfurt type, and is remarkable for its extreme earliness and reliability in heading. Medium size heads. Plants quite dwarf.

Pkt. 20c; ¼ oz. \$1.00; oz. \$2.00

VEITCH'S AUTUMN GIANT.—A large, late variety, very hardy. The heads are well protected by the foliage, enabling it to resist unfavorable climatic conditions.

Pkt. 10c; ¼ oz. 50c; oz. \$1.50; 4 oz. \$5.00

CHICORY

Witloof—Called also "**French Endive**" and "**Christmas Salad**"

Heretofore large importations have been made, but it is easily grown here. Plant the seed in the spring in drills, 12 inches apart, and thin out to 3 or 4 inches apart in the row. About November pull up the roots, break off the leaves, side shoots if any, and small root end so that the roots are not over 10 inches long. At once, or later as you get time, dig a trench about 18 inches deep and reset these trimmed roots, crowns up, placing them about 1½ inches apart. Cover with loose, rich soil; the roots should be set in the trench so that the top will be covered about 8 inches. They will soon make thick shoots or top growth (below the surface), which is the edible part. Dig as wanted, cut just below the crown and serve with French or "Mayonnaise" dressing. Witloof is really a delicate and delicious dish.

Pkt. 10c; oz. 50c

LARGE ROOTED OR COFFEE.—Grown quite extensively for the large, thick roots, which are sliced, dried, roasted and ground as a substitute or adulteration for coffee. To secure large, smooth roots the soil should be light, rich, and deeply worked, and the plants should be thinned out to stand four to six inches apart.

Pkt. 10c; oz. 40c; 4 oz. \$1.25

CHERVIL

CURLED.—An aromatic herb, resembling parsley, and used for flavoring in soups and salads. Fine for garnishing.

Pkt. 10c; oz. 30c; 4 oz. \$1.00

CRESS

CURLED OR PEPPER GRASS.—Used as a salad and fine for garnishing.

Pkt. 5c; oz. 15c; 4 oz. 40c

TRUE WATER.—This is quite distinct from the former and only thrives when its roots and stems are submerged in water. It is one of the most delicious of small salads.

Pkt. 10c; oz. 60c

COLLARDS

TRUE GEORGIA.—Used as "greens" mainly in the South and West. As the leaves are pulled off, others grow in their places.

Pkt. 10c; oz. 25c; 4 oz. 60c

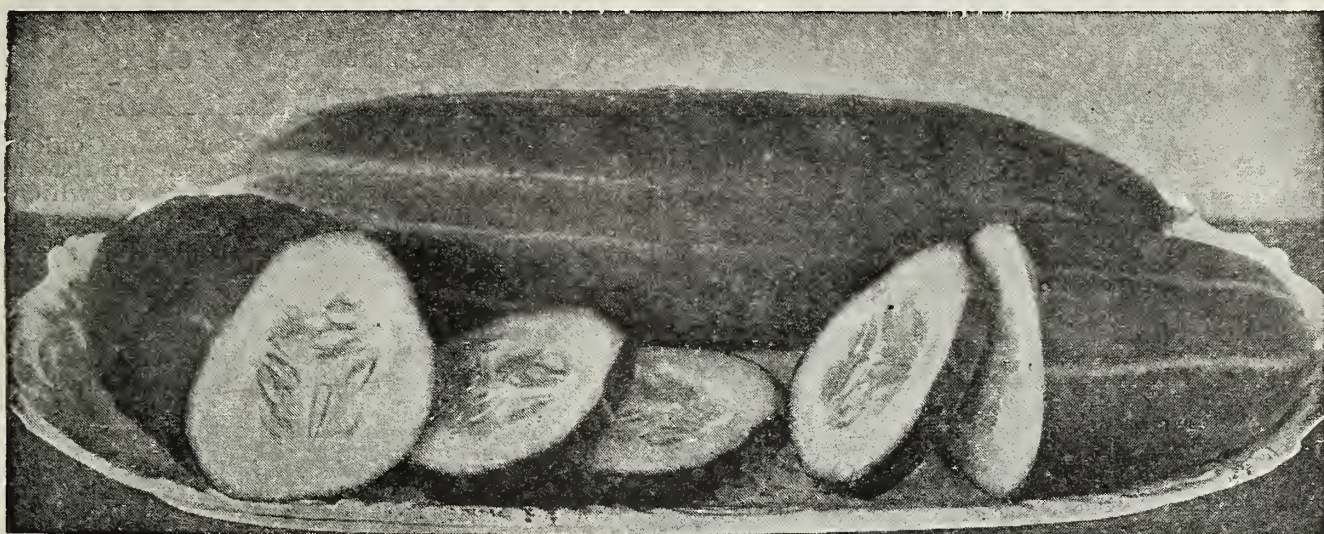
CORN SALAD

Fetticus or Lamb's Lettuce.—This is a hardy winter salad, the small leaves being served like lettuce during the cool fall and early winter months. It does not succeed during warm weather, and the seed should be sown thinly in drills during August, September and October to supply fresh leaves during the cool fall and winter months. It is quite hardy, and after cold weather sets in can be protected by a thin mulch of soft hay or straw.

Pkt. 10c; oz. 25c; 4 oz. 75c

BUG DEATH kills all leaf-eating insects; excellent for using on cabbage, cauliflower, beans, melons, etc. Can be used either dry or in water. See description, page 121; also dusters and blowers, page 126.

CUCUMBERS



Routledge Highest Quality Cucumber

Routledge Highest Quality

A quick grower and always commands "fancy prices" on account of its fine form and superb quality.

It is the earliest white spine cucumber, suitable for table, market or shipping purposes, under all conditions of culture, whether under glass or in the open ground.

Color a very deep green, which it retains during a long period, while in symmetry of form it is so regular, so uniform, as to create comment wherever seen.

Quality is superb, being exceedingly brittle and crisp. The flavor is delicate and entirely devoid of the bitter taste so frequently noticed in other varieties.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.25

Arlington White Spine

One of the best sorts for table use. Vines vigorous, fruiting early and abundantly. Fruit uniformly straight, light, bright green in color, with a few white spines. Flesh crisp, tender and of excellent quality.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$1.75

Improved Long Green

The leading large variety. Fruit from 10 to 12 inches long, dark-green, crisp and tender. A good variety for slicing, and when ripe they are the best for sweet pickles.

Pkt. 10c; oz. 20c; 4 oz. 65c; lb. \$2.00

Davis' Perfect

As now selected, the long, even fruits are of fine form, with an intensely dark rich green skin. The solid white flesh is of superb quality for slicing. So handsome and regular are the fruits, even when grown outside, that they bring an extra price on the market, often being taken for "hot-house grown."

Pkt. 10c; oz. 20c; 4 oz. 65c; lb. \$2.00

Gherkin for Pickling

A very small, oval, prickly variety, quite distinct from all others.

Pkt. 10c; oz. 25c; 1/4-lb. 75c; lb. \$2.50

Japanese Climbing

A vigorous grower, can be trained on a trellis or the garden fence, thereby saving ground space. Fruit from 12 to 16 inches long, dark green and smooth. Flesh pure white, crisp and tender.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.50

Lemon Cucumber

New. Highly recommended by all who have tried it for slicing and salads. Resembles a lemon both in size, form and color. Has a distinctive and delicious flavor superior to and not found in any other cucumber. A variety of real merit—try it.

Pkt. 10c; oz. 25c; 4 oz. 85c; lb. \$2.50

Boston Pickling

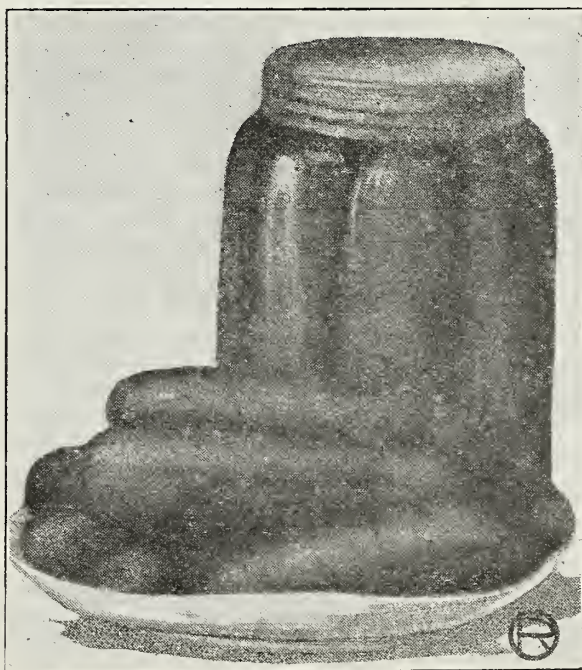
A distinct variety, very popular for pickles; color bright green, a great producer and of excellent quality. It is for producing medium-sized pickles that this variety is so highly esteemed. If the fruits are gathered as soon as large enough, the vines will continue bearing through a long season.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.25

Early Short Green

A very early and productive variety, bright green, rather short, straight and a little smaller at the ends. Crisp and tender. Good for pickling or slicing.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.00

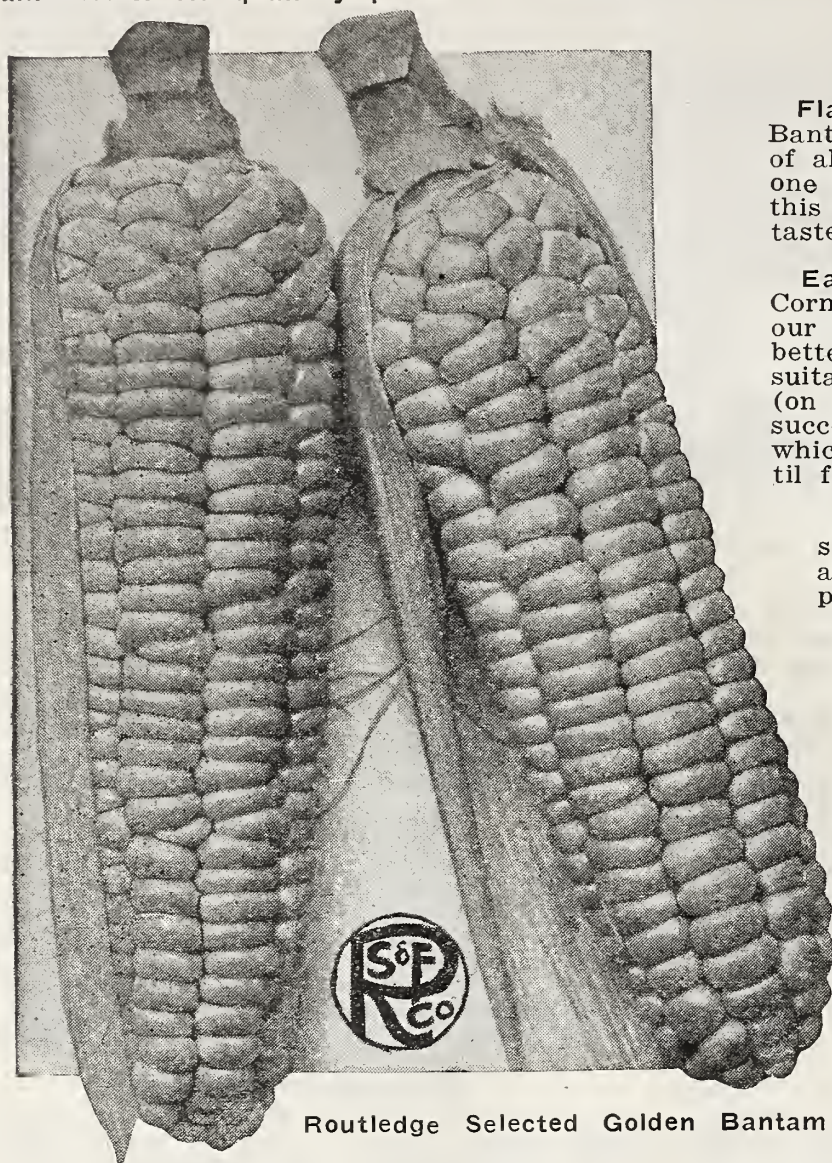


Boston Pickling

USE WONDER.—So many of our customers tell us of the wonderful results, the increased yield and quick growth obtained by using our Odorless "Wonder" Fertilizer, that we again call YOUR attention to it. Remember you can get it by parcel post. See page 38.

Selected Sweet Corn — Northern Grown

Packet and single pound prices only prepaid. Add postage to 10-lb. prices if wanted by mail. Write for quantity price.



Routledge Selected Golden Bantam

Routledge Selected GOLDEN BANTAM

Flavor.—Without exception, Golden Bantam Corn is the richest in flavor of all varieties; a sweet corn of which one will never tire. The first trial of this delicious Sweet Corn creates a taste "like more."

Earliness.—Golden Bantam Sweet Corn is only exceeded in earliness by our "Superb," but we like the quality better. It matures quickly and is suitable not only for early planting (on account of its hardiness), but a succession of sowings may be made which will give continuous supply until fall.

Color.—When picked at the proper stage of its growth the kernels are a rich, creamy-yellow and unsurpassed in quality.

Growth.—Being dwarf in its growth, with stalks small in size, it can be planted quite close, and a large crop may be obtained on a small area. The ears are 8 to 10-rowed, and about 6 inches long—just the right size for the table.

Remember our selected strain is northern grown, better flavored and truer than most seed offered. There is no other yellow or golden sweet corn that can compare to our selected Golden Bantam. Try it and be convinced.

Price: Large pkt. 15c; 1/2-lb. 25c; lb. 40c; 10 lbs. \$3.00; 25 lbs. at 25c.

ROUTLEDGE SUPERB

We do not hesitate to recommend this new sweet corn to our customers. Its earliness, hardiness, size and quality make it of real merit to the Western planters. It is extremely early, almost two weeks ahead of Golden Bantam and one week ahead of Portland Market. The large ears are always well filled with 12 to 14 rows of large, plump, white, sweet grains, of handsome appearance and excellent quality.

Large pkt. 15c; 1/2-lb. 25c; lb. 45c; 10 lbs. \$4.00

Portland Market

An Oregon introduction, a very early, large eared sweet corn and very productive. Its large well-filled ears, together with its plump, sweet grains of purest white, makes it a most profitable home or market variety. Very popular with our market gardeners.

Large pkt. 15c; 1/2-lb. 25c; lb. 40c; 10 lbs. \$3.25

Early Evergreen

This fine variety is 10 to 12 days earlier than Stowell's Evergreen and yields large, handsome, 10 to 12-rowed ears. An excellent variety to follow the first early kinds. Near Portland it will make a late or main crop variety.

Large pkt. 15c; 1/2-lb. 25c; lb. 35c; 10 lbs. \$3.00

MARKET GARDENERS who buy in 20-lb. lots or more get special prices. Write.

Howling Mob

This is one of the newer varieties that has become very popular here for main or late crop. The seed we offer is Oregon Grown and acclimated. You must remember that the early corn listed by Eastern seed houses will be late here.

Howling Mob is a large-eared, vigorous grower, ears large, well protected with husks and having 12 to 16 rows of the sweetest flavored, tender, delicious, white corn—good for canning.

Large pkt. 15c; 1/2 lb. 25c; lb. 35c; 10 lbs. \$3.25

Stowell's Evergreen

A good main crop or late sort. Remains longer in green state than any other. Very large ears, with deep grains, and remarkably sweet. Locally it must be planted early to mature. Quite extensively planted by dairymen for feeding green on account of its sweetness.

Large pkt. 15c; 1/2 lb. 25c; lb. 35c; 10 lbs. \$3.00

POP CORN

WHITE RICE.—Most popular and profitable kind; short ears, white, pointed kernels.

Large pkt. 15c; lb. 40c; 10 lbs. \$3.00

FIELD CORN.—Don't overlook what we have to offer in OREGON-GROWN FIELD CORN; "the best ever." See page 45. For HAND CORN PLANTERS see page 120.

How to Make and Care for Home Gardens

Special 10c per copy

This 16-page booklet, priced at 25c, will be sent to any of our customers with a seed order amounting to \$2.00 or over for only 10c EXTRA. It is nicely illustrated and gives cultural directions covering all vegetables.

CELERIAC

Turnip Rooted Celery.—The roots, which are the edible portion, keep well for winter use and are excellent for soups and stews. They are also cooked and sliced as a salad. Sow seed at the same season and give the same treatment as any root crop.

LARGE ERFURT—An improved form, producing large, smooth roots, which are nearly round. Pkt. 10c; oz. 25c; 4 oz. 75c

EGGPLANT

Sliced and fried takes the place of meat. Culture same as for tomatoes.

NEW YORK IMPROVED SPINELESS.—Considered the best variety. Oval shaped, deep-purple, large size and fine flavor.

Pkt. 10c; 1/2-oz. 45c; oz. 75c

ENDIVE

This plant furnishes an attractive and appetizing salad for the fall and winter months or by repeated sowings a supply may be had nearly all the year round. Useful in flavoring soups, stews, etc. Makes delicious greens if cooked like spinach. Cultivation same as for lettuce. The bleaching of Endive is brought about by drawing the leaves together into a head and tying them and this should be done a month before it is wanted for table use.

BROAD LEAVED BATAVIAN.—Leaves are broad, thick, green, more or less twisted and waved with white mid-ribs. It forms large hearts, which when blanched, form one of the best winter salads. Crisp, tender and fine flavor.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

GREEN CURLED.—The hardiest of all, with beautifully curled dark-green leaves, tender and crisp.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.25

WHITE CURLED.—Very tender and light green, blanches easily, very ornamental.

Pkt. 10c; oz. 15c; 4 oz. 40c; lb. \$1.25

GARLIC

Garlic is a perennial plant with a bulbous root and belongs to the onion family. It has flat leaves and the bulb is composed of several parts or bulblets similar to those of a multiplier onion set. We cannot offer seeds but can supply the bulbs or sets.

Prepare the ground as for onions, separate the sets and plant them in drills eight inches apart and four to six inches apart in the drill, covering two inches deep. Cultivate like onion sets. When the leaves turn yellow, pull up the bulbs and dry in the shade.

Per lb. 60c postpaid

Write for quantity price. Requires about 250 lbs. sets per acre.

HORSERADISH ROOTS

Will form radishes of large size in one season's growth. For prices, see Vegetable Plants and Roots, page 115.



Dwarf Green Curled

KALE, OR BORECOLE

This is a popular boiling-green resembling cabbage in flavor. The plant is entirely hardy in well-drained soil and can be grown easily from seed planted during the summer and fall months. With the tall varieties it is customary to pull off the lower leaves and let the plant grow on to furnish a continuous supply. The sweetness and flavor of these greens are improved by frost or light freeze.

Dwarf Green Curled

Beautifully curled, bright-green leaves, tender and of fine flavor.

Pkt. 10c; oz. 20c; 4 oz. 65c; lb. \$2.50

Tall Green Curled

Grows about 2 feet high; leaves dark-green; curled and wrinkled; very hardy.

Pkt. 5c; oz. 20c; 4 oz. 65c; lb. \$2.00

Emerald Isle

A very handsome variety of medium height. Leaves attractive, closely curled and of fine flavor.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.50

THOUSAND-HEADED.—For stock feeding. Pkt. 5c. See Field Seeds, page 44.

KOHL-RABI

A delicious vegetable. In growth this is half way between cabbage and turnip; the edible portion is the large bulb which forms on the stem above the soil. By making successive sowings, tender bulbs may be had throughout summer and fall, and are highly esteemed for their mild, delicate, cabbage-like flavor. Slice and boil, discarding the hard lower part of bulb. Sow in drills or raise and transplant like cabbage, 6 to 10 inches apart.

EARLY WHITE VIENNA.—Extremely early, medium size, excellent quality.

Pkt. 10c; oz. 30c; 4 oz. \$1.00; lb. \$3.00

LEEK

A species of onion which does not form a bulb, but is used for its mild and delicious root, stem or neck. Plant in rows and thin to about four inches. Hardy, and frost improves the flavor. Hill up to whiten.

American Flag

Mild and sweet; long, large stems; hardy and of the finest quality.

Pkt. 5c; oz. 25c; 4 oz. 90c

CARENTAN.—Very broad, thick stems of good flavor. Very large variety.

Pkt. 10c; oz. 35c; 4 oz. \$1.00

On Cucumber and Garden Plants use "Bug Death" for insects (see page 121), and "WONDER FERTILIZER" (see page 38), and you will be more than pleased with results.

LETTUCE

Grand Rapids

Very popular with private gardeners and as a lettuce for greenhouse forcing. It will stand shipping better than most curled sorts. Of quick growth and stands for some days after being fit to cut. The plant is upright, and forms a loose head or cluster of large bright-green leaves, finely crimped and ruffled; rather thin, good flavor, crisp and tender. Pkt. 10c; oz. 20c; 4 oz. 65c; lb. \$2.00

Early Prize Head

A large, clustering, non-heading lettuce, excellent for the home garden and undoubtedly the most easily grown variety in cultivation. Leaves finely curled and crumpled, bright green tinged with brownish-red, very crisp, tender and sweet.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$1.50

Big Boston Improved

Plants large, very hardy and vigorous. Leaves broad, comparatively smooth, wavy at edges, thin, very firm and crisp; color bright light-green, slightly tinged with reddish brown. Grown extensively in the South for shipment North in the winter. It usually heads up under cold weather conditions better than any other variety.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$1.50

EARLY WHITE COS.—*Trianon Cos* or *Romaine*.—Distinct in having long, narrow spoonshaped leaves, folding into loose, sugar-loaf-shaped heads which branch better by having the outer leaves drawn about them and tied. Leaves yellowish white, crisp, tender and of a distinct and pleasing flavor.

Pkt. 10c; oz. 25c; 4 oz. 70c; lb. \$2.00

SIMPSON'S EARLY CURLED.—A very extensively used early loose-leaved, or clustering variety. Leaves light-green, slightly frilled, crisp, sweet and tender.

Pkt. 5c; oz. 20c; 4 oz. 50c; lb. \$1.50



Grand Rapids

Hanson

Improved Hard Heading Stock.—The leading head lettuce. We can recommend this as one of the very best. Heads green outside and white inside; grow to a remarkable size; very solid, and is deliciously sweet, crisp and tender. It withstands the hot sun.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.50

Nahcotta, Wash., Feb. 8, 1921.

Routledge Seed & Floral Co.

Gentlemen: My Sweet Peas last year, grown from your seed, were perfectly wonderful in color, size and length of stems and abundance of blossoms, and the admiration of the many who saw them last summer. Routledge Seeds and Mulford Culture were well advertised.

Very respectfully,

C. V. LUNDBERG.

25c Booklet for 10c

"HOW TO MAKE AND CARE FOR THE HOME GARDEN." 16 PAGES. WE MAKE THIS SPECIAL PRICE WITH A \$2.00 ORDER.

R. R.'S WONDERFUL

A re-selected, hand-picked strain of the original New York or Wonderful. Our grower has given this stock special attention and it is a wonderful strain. It produces immense heads of closely folding ruffled leaves. The heart blanches beautifully and is crisp, tender and delicious. A robust variety, rooting deeply and thus able to resist hot, dry weather; slow to seed and a sure header. The outer color is of a distinct apple-green. A rapid grower and unsurpassed as a home or market lettuce.

Pkt. 15c; 1/2-oz. 35c; oz. 60c; 4 oz. \$2.00; lb. \$6.00.



R. R.'s Wonderful

HIGHEST QUALITY LETTUCE SEED.—We pay our grower extra money for selecting seed from extra choice stock. It's worth double common seed generally offered.

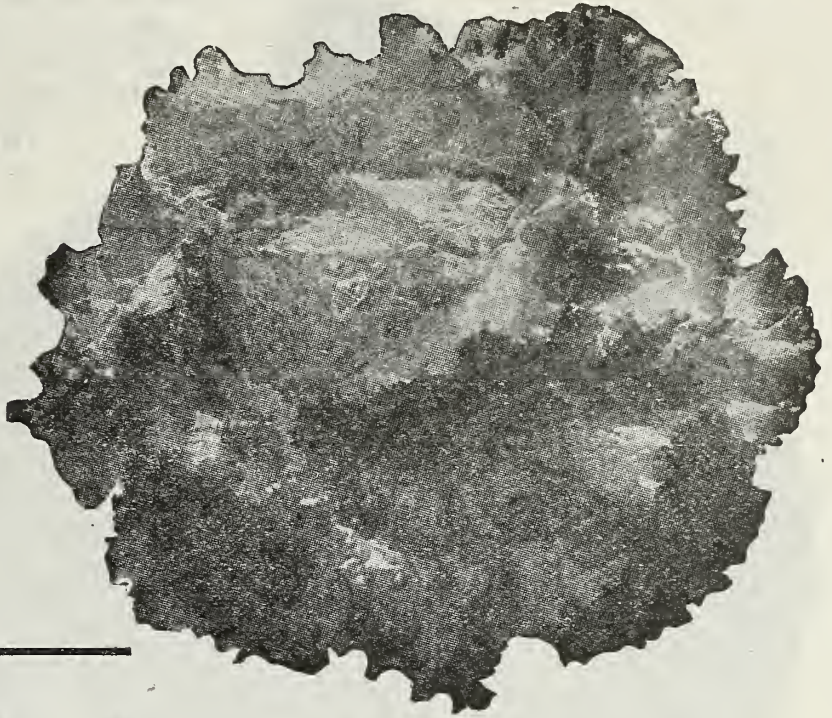
LETTUCE — Continued

R. R.'s Tender Crisp

A distinct and extra choice variety for those who like curly, crisp, tender Lettuce of the finest quality.

Grows to a large size, makes most desirable heads of pleasing appearance, and retains its crispness and mild flavor to a greater degree during the hot summer months than any other crisp-head variety. While especially adapted for midsummer, it is most desirable also for spring and fall. The plants are of quick, strong growth; the leaves are of a soft, bright-green, growing closely around the heads, which become quite solid. The heart blanches to a beautiful white, and crisp and brittle as could be desired.

Pkt. 10c; $\frac{1}{2}$ -oz. 25c; oz. 40c; 4 oz. \$1.25; lb. \$3.50.



R. R.'s Tender Crisp Lettuce

New York (Los Angeles)

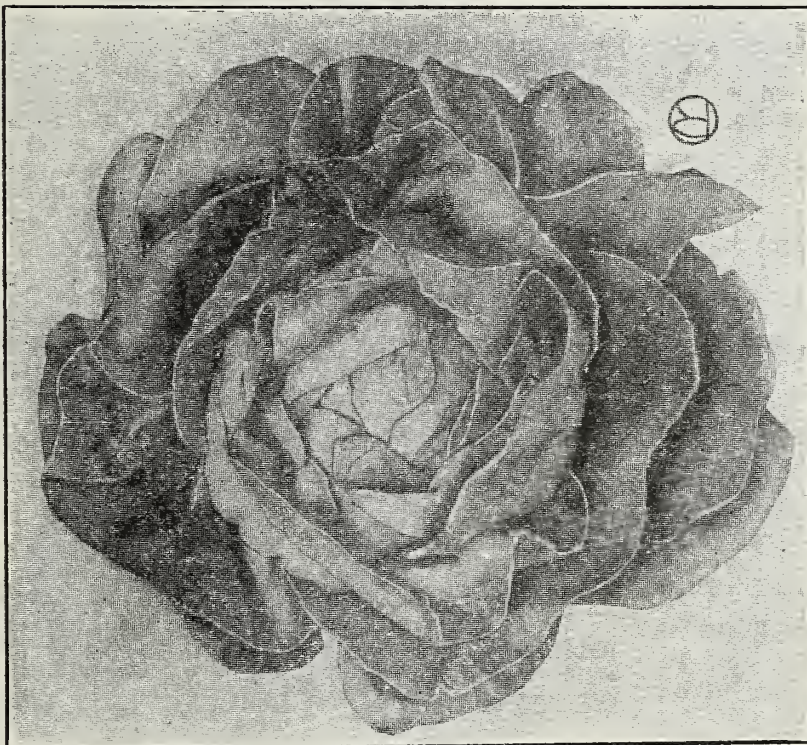
A large, crisp, curly-leaf, close-heading lettuce of the finest quality. A great favorite in the markets of Los Angeles and San Francisco. Carloads of this variety are shipped by California growers and it brings the highest prices.

Pkt. 10c; oz. 50c; 4 oz. \$1.65; lb. \$5.00

Early May King

The plants are of quick growth, practically all head and extremely handsome. From early spring plantings in the open ground they grow quickly to a diameter of 6 to 7 inches with the broad, light-green outer leaves folding closely about the round, solid head. The inner leaves (practically the entire head) are branched to a rich golden yellow and have a specially fine, rich, buttery flavor. Excellent shipper.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$1.50



Way-a-head—Extra Early

"La France"

Get Your Start This Year

See page 131—also back cover.

Way-a-head Extra Early

A new lettuce showing a remarkable combination of earliness, firm heading character, handsome appearance and fine quality. Both in cold-frames early in the spring and in the open ground—in spring, summer and early fall months—it has proved to be not only the earliest and one of the surest heading of all early lettuce, but also of the very finest quality. The tightly folded heads are of good size and handsome appearance. The outer leaves are a light-green with the inner head finely blanched to a rich buttery yellow. We urge you to try this new variety (see cut).

Pkt. 10c; $\frac{1}{2}$ oz. 20c; oz. 35c
4 oz. \$1.00; lb. \$3.00.

PLANT SMALL FRUITS around your garden. What's nicer than delicious fresh fruit, fresh from your garden? See Fruit Department, pages 106 to 115.

True Seeds

ONION

Highest Quality

NEW ONION CULTURE

By T. Greiner. A new method of growing onions of the largest size and yield on less land than can be raised on the old plan. 140 pages. Postpaid \$1.25. (Other good books on page 128.)

Oregon Yellow Danvers

This is the variety planted almost entirely in the Northwest, particularly in Oregon. The largest crops of onions and the best keepers, bringing the highest prices in the Pacific Coast and Middle Western markets, are the Oregon Yellow Danvers. The bulbs are uniformly large, a full three quarters globe shape, with small necks. It is the earliest, largest in size, most perfect in shape, the largest cropper and the best keeper, and as a market or table onion cannot be excelled. Our seed is grown specially for us and is unsurpassed. No onion grower can afford to plant anything inferior when such seeds can be obtained at the following prices:

Pkt. 10c; oz. 30c; 4 oz. 80c; lb. \$2.75.



Oregon Yellow Danvers Onion

Redmond, Ore., Sept. 23, 1921.

Routledge Seed & Floral Co.

Gentlemen: The seed I got of you last spring did fine. I have some nice vegetables and grains that I want to take to the fair.

Yours very truly,

W. W. VAN MATRE.

Yellow Globe Danvers

One of the most extensively used yellow onions. Bulbs of good size, uniformly globe-shaped, with small neck, and ripen very evenly. Flesh white, crisp and of mild and excellent flavor. An enormous yielder and a fine keeper. We offer a select strain, unsurpassed.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.50

Australian Brown

Its remarkable keeping qualities and handsome appearance makes it very desirable. Resembles the Yellow Danvers in general appearance, but has a clear, amber-brown skin. It matures early, ripens uniformly and is a good, long keeper.

Pkt. 5c; oz. 20c; 4 oz. 60c; lb. \$1.75

Southport White Globe

An enormous yielder and superb keeper; perfect globe-shaped, very large, clear white skin and considered one of the handsomest varieties grown. Planted extensively by market gardeners for green onions.

Pkt. 10c; oz. 30c; 4 oz. 90c; lb. \$3.00

White Portugal or Silverskin

The finest flavored of all the white-skinned onions. Quite early, half-globe shaped, a fine cropper; very firm and an excellent keeper. Planted thickly in broad drills; makes fine pickling onions.

Pkt. 10c; oz. 30c; 4 oz. \$1.00; lb. \$3.00

Large Red Wethersfield

The Standard variety of the red onions. Of large size, half globe, a heavy yielder, and one of the best for keeping. Skin a deep purplish-red, smooth and glossy; will do better on fair upland soil than most varieties; flesh white, rather strong.

Pkt. 5c; oz. 25c; 4 oz. 60c; lb. \$2.00

Routledge Prize Taker

This onion has become a great favorite on account of its large size and great solidity. It is perfectly globe-shaped, with straw-colored skin; the necks are very small and the onions always ripen up hard. An excellent keeper, exceedingly fine, mild flavor and a very popular variety. (See cut, next page.)

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.50

Extra Early Red Flat

The first Red Onion to ripen. A medium-sized, flat variety; an abundant producer and very uniform in shape and size; fine grained, mild flavored, and comes into use nearly two weeks earlier than the Large Red Wethersfield; very desirable for early market use.

Pkt. 10c; oz. 30c; 4 oz. 75c; lb. \$2.25

THIS WILL
PROTECT
ONIONS
FROM BUGS



SEE FULL PARTICULARS, PAGE 121.

DO YOU SEND EAST for your Seeds? Coast. Here's where you sell your products.

It's bad policy. Spend your money on this Our seeds are highest quality.

ONION — Continued

Highest Quality True Seed

SOUTHPORT RED GLOBE

A large globe-shaped onion and the most richly colored red variety. Is a late sort and an excellent keeper. A very handsome variety and of fine quality.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.75

White Bartletta—Queen

An early white variety; prized for home gardens and pickling on account of its small size. White Portugal is a much better keeper and if planted thickly in wide drills will stay small.

Pkt. 10c; oz. 40c; 4 oz. \$1.35; lb. \$4.00

Crystal White Wax

A large, pure white, flat onion. During the last few years it has become very popular. Extremely early and one of the mildest and sweetest of all. It is very fine for slicing, the color being so clear and pure. We offer the genuine true seed.

Pkt. 15c; oz. 40c; 4 oz. \$1.35; lb. \$4.25

ONION SETS

NOTE.—Onion sets subject to market changes; short crop this year.

BOTTOM ONION SETS.—These small onions are grown from seed that have been sown too thick to attain a large size. The small onions (about ½-inch in diameter) thus obtained are planted out and are ready in a short time to pull as green onions for the table.

Per lb. 35c; not postpaid 25c; 5 lbs. \$1.00. Write for quantity prices.

TOP SETS, lb. 40c; not postpaid, 30c.

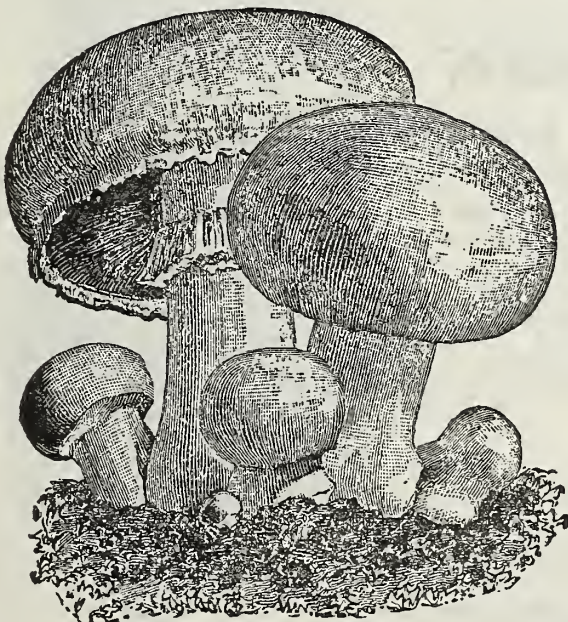
Shallots.—Valuable for bunching or for an early crop. Each bulb makes from 3 to 5 green onions.

Per lb. 35c; 4 lbs. \$1.25; prepaid

OKRA

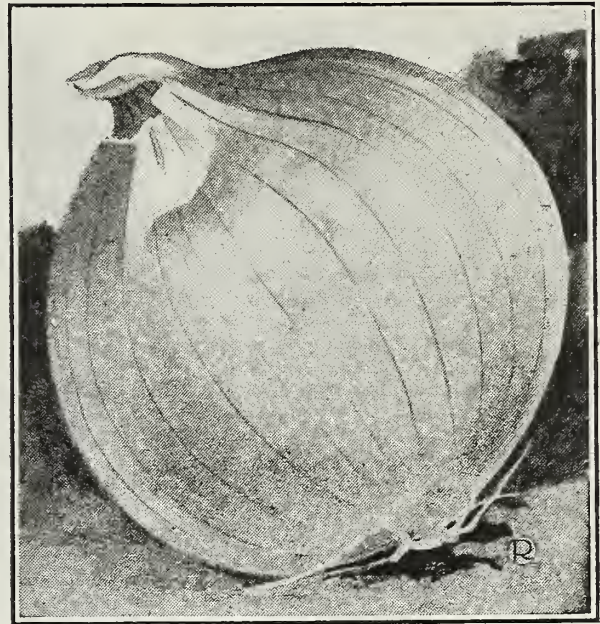
IMPROVED DWARF GREEN.—Very productive; long, slender green pods.

Pkt. 5c; oz. 15c; 4 oz. 30c



Mushrooms

MUSHROOM CULTURE.—We have instructive leaflets on Mushroom Culture. Free with an order of one or more bricks.



Routledge Prize Taker (see next page)

MUSTARD

The leaves of mustard make excellent greens of sharp, pungent flavor, and are cooked the same as spinach or beet leaves.

Southern Giant Curled

Large variety, forming a great mass of beautiful leaves, which are ruffled and finely curled on the edges; hardy, vigorous, highly recommended.

Pkt. 10c; oz. 20c; 4 oz. 35c; lb. \$1.00

Ostrich Plume

Leaves dark-green, beautifully curled and plume-like. Very vigorous and productive, stands well. Of distinctive flavor, superior to spinach for greens and excellent for salad.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.25

WHITE ENGLISH.—Light-green variety; tender leaves; seed light-yellow.

Pkt. 5c; oz. 15c; 4 oz. 40c; lb. \$1.00

MUSHROOM SPAWN

LAMBERT'S PURE CULTURE SPAWN.—

Mushrooms may be grown in any place where conditions of temperature and moisture are favorable. A shed, cellar or cave may be utilized to advantage for this purpose. It is essential that the temperature be maintained from 53 to 60 degrees F., and that the moisture be properly regulated. Lambert's Pure Culture Spawn is far superior to the old-style varieties, and much better results can be obtained from its use. The bricks should be broken into pieces about two inches square and planted from 10 inches to a foot apart. Bricks weigh from 18 to 20 ounces. A brick will spawn 10 square feet of bed. With Lambert's Pure Culture Spawn it is impossible to raise poisonous mushrooms.

DIRECT SPAWN.—Latest and best. Mammoth White, Cream White or Bohemian Brown.

Price, per brick, not prepaid, 35c; 10 bricks \$3.00; add postage at rate of 1½ lbs. per brick. Write for quantity price.

MUSKMELON

Netted Rock of Rocky Ford

**The Most Popular and Best
Seller Among Muskmelons**

The fruit is oval and completely covered with a beautiful lace-like netting. Flesh very thick; green, very sweet, luscious, melting and superb flavor. The fruit is wonderfully uniform in shape and quality. The favorite everywhere.

Pkt. 10c; oz. 25c; 4 oz. 60c; lb. \$1.50.

Burrell's Gem

Select Strain.—A new, medium-sized oval variety, well ribbed and covered with a fine grayish netting and having reddish-orange flesh of fine, spicy flavor, sweet and delicious, distinct flavor. There is a growing demand here for the fine-grained, smooth, salmon, red-fleshed Muskmelons.

Pkt. 10c; oz. 25c; 4 oz. 60c; lb. \$1.50.

The Hoodoo

One of the best of recent introductions. It is early and prolific. The fruit is of medium size, the seed cavity very small, the rind very thin, indeed, and the edible fleshy part thick and meaty. It is of orange or salmon color, the type much preferred now; but its great charm is its flavor which is par excellence. Test it.

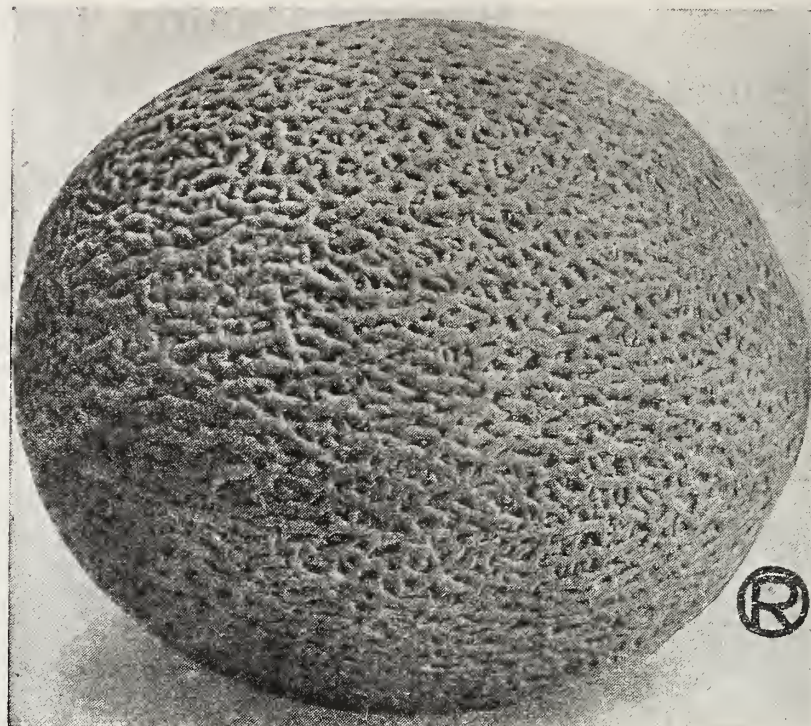
Pkt. 10c; oz. 25c; 4 oz. 60c; lb. \$2.00

Golden Beauty Cassaba

Fall and Winter Muskmelons

Skin wrinkled, flesh thick, excellent flavor and fine aroma. When nearly ripe pick and stow away in a cool, dark place until the rind becomes slightly softened and moist. Melons will actually keep until February.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.50



Netted Rock—Rocky Ford

Osage, or Miller's Cream

Medium to large, flesh thick, deep salmon, of excellent quality, rich and sweet; skin dark-green, slightly netted and ribbed. A favorite variety for the later markets.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

Montreal Improved Nutmeg

Valued for its size and delicious flavor. Round in shape, with remarkably thick green flesh. One of our handsomest varieties.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

Puyallup, Wash., Feb. 9, 1921.

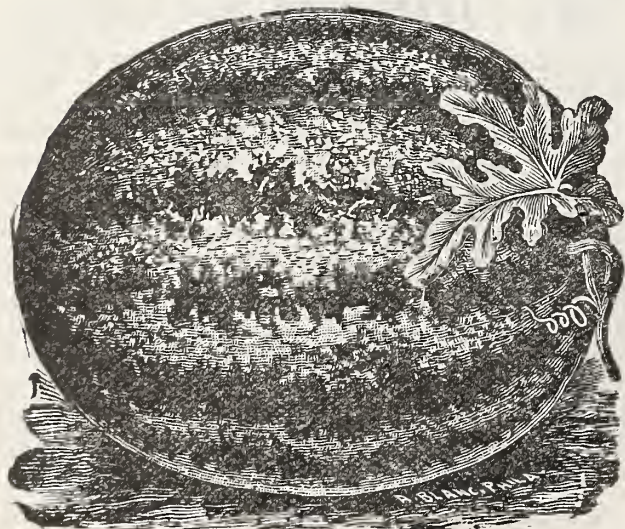
Routledge Seed & Floral Co.

Gentlemen: Please send me a new catalog. I want to get some seed. The seed I got last year was the best seed I ever got.

Yours truly,

BERTHA RHODER.

WATERMELON



Routledge's Oregon Prize

ROUTLEDGE'S OREGON PRIZE

We offer this new Melon with the assurance that it is not only remarkably early, but as sweet, delicate and melting in flavor as any variety grown.

The flesh is of a deep scarlet; rind thin, and on this account is not a particularly good shipping sort, but is emphatically the variety for home use and sale. It will ripen in altitudes where it has not been thought possible to mature a good watermelon.

Pkt. 10c; oz. 25c; ¼-lb. 60c; lb. \$2.00

KLECKLEY'S SWEET

Unsurpassed for home use or near markets. Vine vigorous and productive; fruit of medium size, oval; color dark-green; flesh very bright, rich red and exceedingly sweet.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

Citron, Red Seeded.—Flesh white and solid, used exclusively for pickles and preserves.

Pkt. 10c; oz. 25c; 4 oz. 50c

"Highest Quality" GARDEN PEAS Hand Picked

There is a vast difference in "strains" of garden peas. You will find our stock "very superior," healthy, vigorous and true, much better than the average seed sold by wholesale seed dealers and jobbers. Try them if you want "Highest Quality."

Packet and single pound prices only are prepaid. Add postage to 10-lb. prices if wanted by mail. WRITE FOR QUANTITY PRICES, but new crop of new pea seeds is very short.

Alaska

An extra early, exceedingly hardy pea. Pods of perfect shape, well filled with smooth peas of good quality. Height 2½ feet. Can safely be planted very early.

Large pkt. 15c; ½ lb. 20c; lb. 30c; 10 lbs. \$2.25

American Wonder

Well known and very popular; extra early, productive and good flavor; vines grow 10 inches high.

Pkt. 15c; ½ lb. 20c; lb. 35c; 10 lbs. \$3.00

Burpee's Blue Bantam

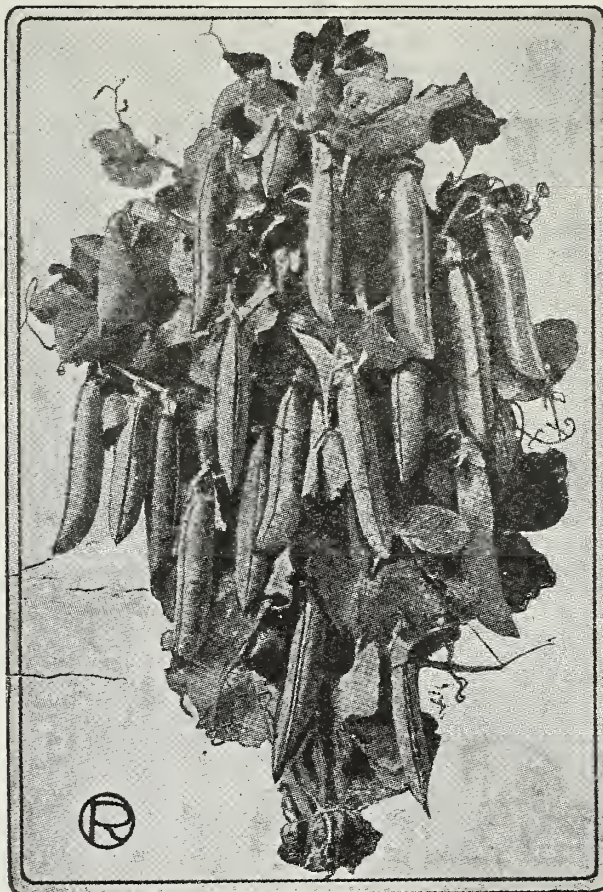
Unsurpassed for extreme earliness, superb quality, and unusual productiveness. The dwarf vigorous vines average 15 inches in height and carry really enormous crops of large, deep bluish-green pods. The handsome pointed pods average 4 inches long and are tightly packed with extra large, deep bluish-green peas of most luscious flavor.

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$3.25

British Queen

A new English variety, very early. A garden pea of startling merit. Its sturdy, healthy vines produce in profusion an abundance of good-sized pods filled with dark-green peas of superb, sweet flavor. A great favorite where known. (See cut.)

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$3.25

**Duke's Delight****Duke's Delight**

A very dwarf, extra early, delicious pea of great merit. Our own introduction.

Our regular customers are now demanding it in preference to Premium Gem, Notts Excelsior and other old standard sorts.

Duke's Delight easily outclasses these old popular kinds in productiveness, size and fullness of pods, color, sweetness and flavor. The sturdy, stocky, healthy vines grow about 12 to 14 inches high. Every grower praises it. Read reports below; we receive many like them.

Large pkt. 15c; ½ lb. 25c; lb. 50c; 10 lbs. \$4.00

Veronia, Ore.

Routledge Seed & Floral Co.

Gentlemen: I want to tell you that I think the Duke's Delight Peas the best pea I have ever planted. For canning they are the best and sweetest I ever tasted. Every jar I have opened this winter sure has been a "Delight." Friends have asked how I canned my peas that they taste so good. I tell them it is not how I canned them, but the kind I canned.

I am always glad to speak a good word for Duke's Delight Peas and wish the Routledge Bros. much success.

Very truly yours,

MRS. HERMAN L. GREENER.

Lancaster, Wash., June 21, 1921.

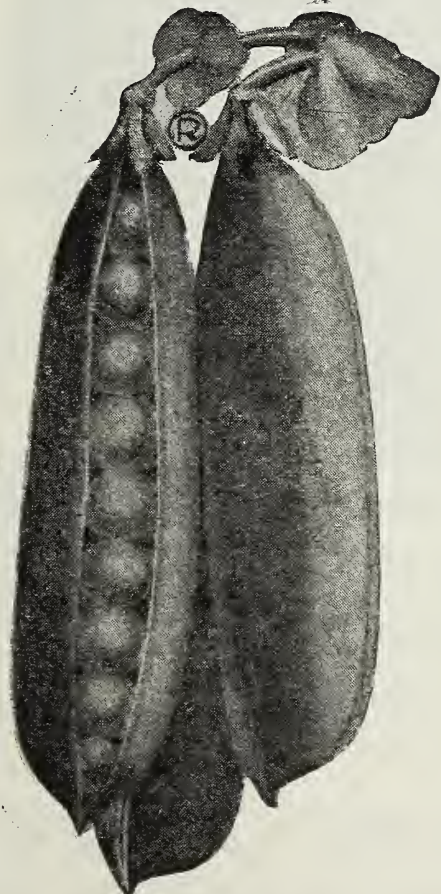
Routledge Seed & Floral Co.

Dear Sirs: I want to tell you that I think the Duke's Delight Peas, Way-a-head Extra Early Lettuce, Routledge Model Carrots and your Favorite Beets are the best I ever planted.

I have one bird. I would not get my bird seed any other place.

Yours truly,

MISS ELLEN FULTON.

**British Queen**

Be sure you read about Mulford's Culture for inoculating pea seed. Increase the yield and improves the soil. (See page 41.) Plant extra early, early and late varieties all at same time for a succession of prime pods.

Highest Quality Garden Peas — Continued

Market Gardeners who buy Peas in quantity should write us for prices, stating variety and amount wanted. Single pound prices only are prepaid. Postage extra 10 lb. lots.

SUTTON'S EXCELSIOR

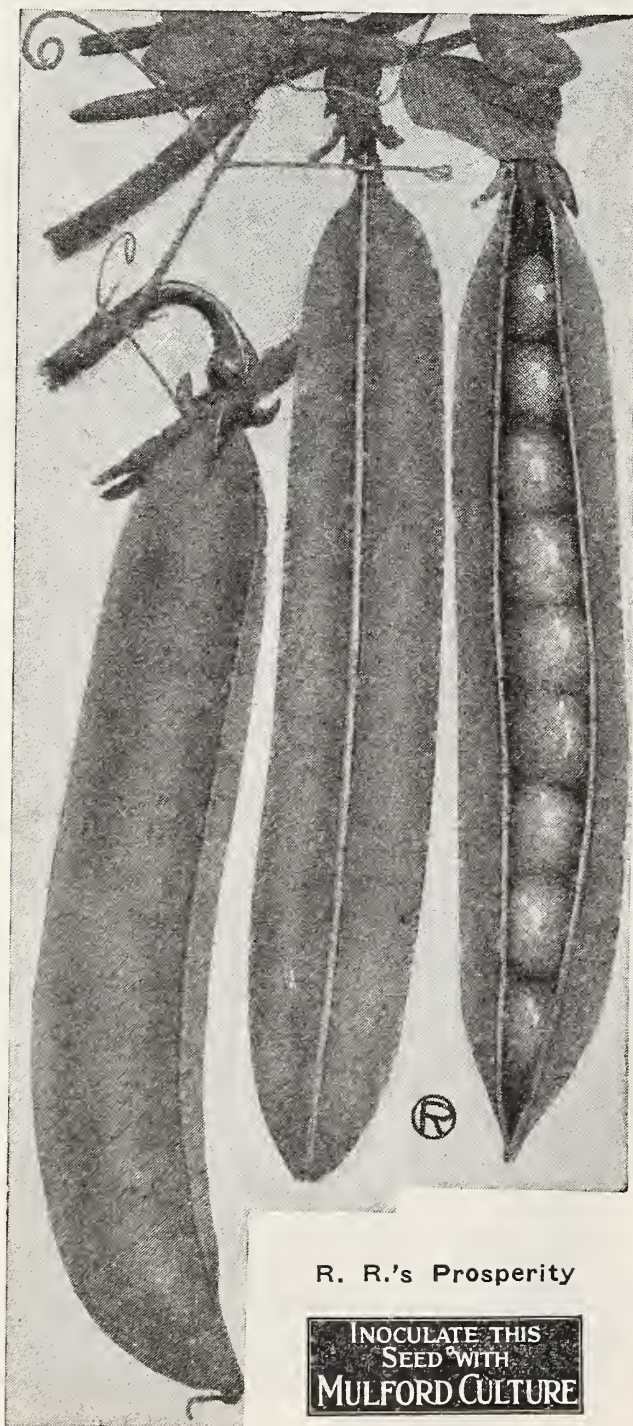
Very early and very hardy, may safely be planted as early as Alaska. The plants are dwarf and sturdy, exceedingly productive and the "quality" is all that could be desired. The pods are large for so dwarf a variety and always well filled.

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$3.00

LITTLE MARVEL

Very valuable variety, especially suited to small home gardens. It matures very early and produces large crops. Vines 15 and 18 inches high. The pods are dark-green, medium size, and are closely filled with peas of extra fine flavor.

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$3.50



R. R.'s Prosperity

INOCULATE THIS
SEED WITH
MULFORD CULTURE

RICHARD SEDDON

The pods are deep green, crowded with from 7 to 9 large peas of very fine color and flavor. An extremely early type. A splendid all-around early dwarf variety. On account of its immense productivity, evenness of maturity, compact, well filled pods and excellent color and quality, it is especially desirable for canning purposes.

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$3.00

R. R.'S PROSPERITY

The Earliest Large Podded, Sweet Garden Pea to date. It is hardy, can be planted very early. Is vigorous and robust grower; height 3½ to 4 feet; only a few days later than the earliest dwarf sorts.

The pods are very large, and are invariably well filled with from 8 to 10 sweet, large, tender peas of delicious flavor and quality.

The peas remain tender and sweet for some time after they are large enough to use. Its heavy yield and excellent quality makes it a most profitable market variety.

Large pkt. 15c; ½ lb. 25c; lb. 45c; 10 lbs. \$3.75

LAXTONIAN

This is an ideal market and home garden pea, quite dwarf in habit of growth but with very large pods, filled with large, dark-green peas of excellent quality. You will be pleased with Laxtonian.

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$3.25

DWARF TELEPHONE—DAISY

A splendid mid-season variety, growing only about 18 inches in height, vines very stout and bear a good crop of large, well-filled, bright-green pods. The pods average 5 inches in length, containing 7 to 9 large peas which are tender and sweet.

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$3.00

GRADUS

Extra early. This popular large-podded wrinkled pea of finest quality matures pods only two or three days later than the small-podded extra earlies. Vines four feet high. It produces uniformly large, long pods, nearly round, and well filled with very large, handsome peas of the finest flavor.

Large pkt. 15c; ½ lb. 25c; lb. 40c; 10 lbs. \$3.00

EDIBLE PODDED OR SUGAR PEAS

A great favorite with many. In the Edible-Podded or Sugar Peas the pods are gathered, broken and cooked like string-beans when the peas start to develop in the pod or have reached about half their full size.

DWARF SUGAR.—Grows about 2 feet in height, producing a heavy crop of small, flat pods about 3 inches in length.

Large pkt. 15c; lb. 40c

MAMMOTH MELTING SUGAR.—Grows 4 feet tall, producing very large, broad flat-tended pods.

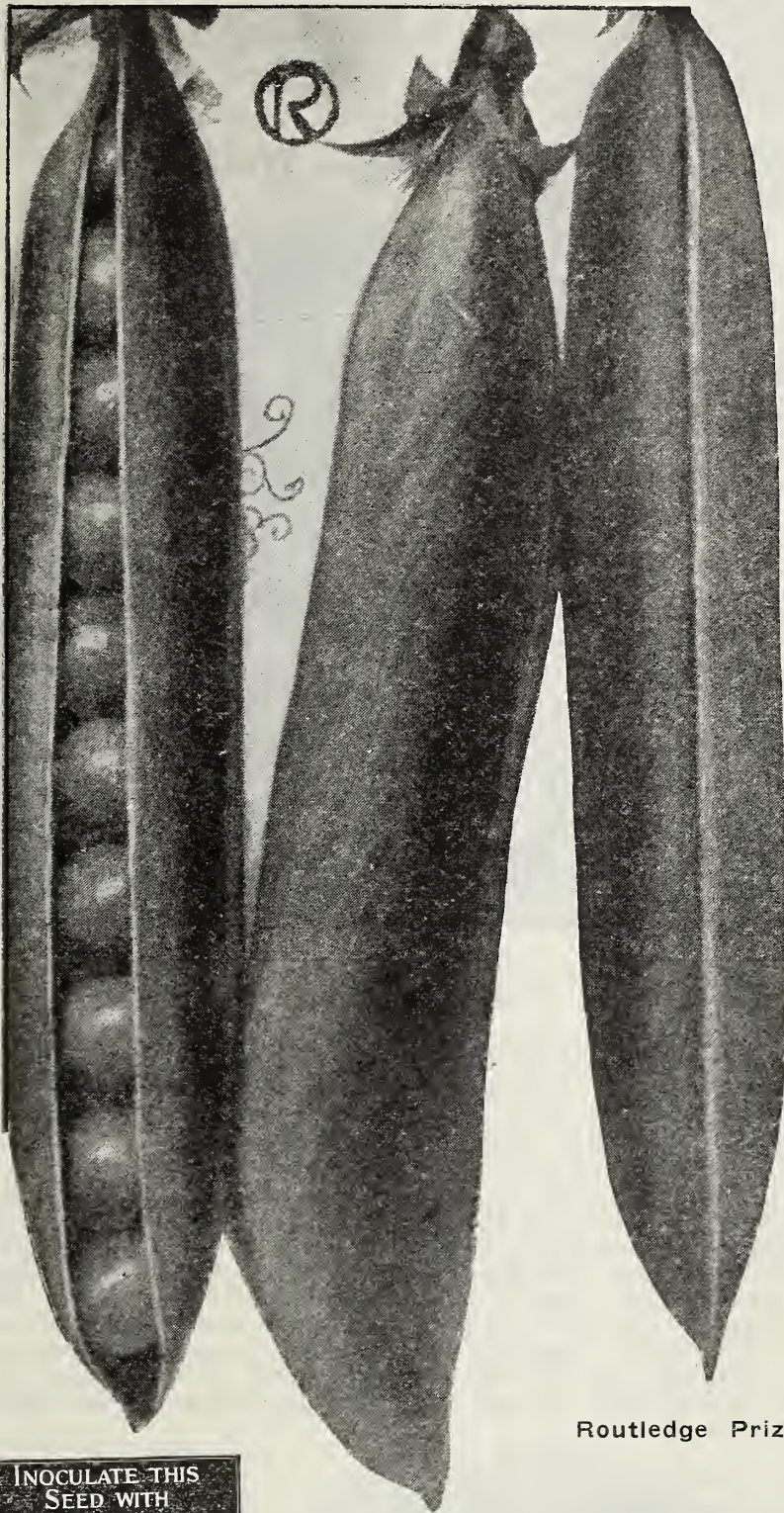
Large pkt. 15c; lb. 40c; 10 lbs. \$3.50

DON'T

practice false economy in buying low-priced seeds. High quality, 1921, new-crop seeds cannot be sold for less. Low prices means old seed. Be careful.

PEAS—CONTINUED—LARGE PODDED, LATE OR MAIN CROP

Packet and single pound prices only postpaid. Prices high. New crop very short.



Routledge Prize

IMPROVED STRATEGEM

A very productive semi-dwarf variety with large leaves and large pods. The peas are dark-green, wrinkled, and large. It is planted in large quantities by gardeners for market. In quality it is unsurpassed, the peas when cooked being of the most delicious sweetness.

Large pkt. 15c; 1/2 lb. 25c; lb. 40c; 10 lbs. \$3.00. Low price per 100 lbs.

TELEPHONE

One of the most popular and largest peas we have. Vines attain a height of 4 1/2 feet, bearing profusely the extra long, handsome pods; tender, sweet and superb flavor. We offer a very carefully rogued, select strain of unusual merit.

Large pkt. 15c; 1/2 lb. 25c; lb. 40c; 10 lbs. \$3.00. Low 100-lb. prices.

Routledge Prize

A new, sweet, wrinkled mammoth podded Pea of extra value.

This new strain from New Zealand will be found true to name. A strong, sturdy, healthy grower. Vines and pods are a rich green. A bushel of Routledge Prize pods will shell out nearly twice as many peas as a bushel of Telephone. The vines are enormously productive, being completely covered with immense long pods, well filled with from 8 to 11 large peas of the richest flavor. This variety grows 4 to 5 feet high and as an abundant cropper is superior to all other tall sorts.

Nothing in the line of peas excels the Routledge Prize in richness, sweetness and flavor. We are sure our customers will agree with us after testing this new pea. (See cut.)

Large pkt. 15c; 1/2 lb. 25c; lb. 40c; 10 lbs. \$3.25.

Medford, Ore., Jan. 25, 1921.

Routledge Seed & Floral Co.

Dear Sirs: About three years ago we began sending to you for our garden seeds, and I thought a few lines as to our success with same would probably be of some interest. The Irish Cobbler potatoes, better in quality and quantity than recommended in your catalog. The Duke's Delight peas cannot be beat for flavor or productiveness. Your lettuce—Way-a-Head extra early, is way ahead of anything in that line, the radishes, Icicle, and beets, Routledge Favorite, were par excellent.

Thanking you for the effort you seem to be making in the production of better and better products.

Very truly yours,

MR. AND MRS. T. HEIMROTH.

INOCULATE THIS
SEED WITH
MULFORD CULTURE

Jacksonville, Ore., May 25, 1921.
Routledge Seed & Floral Co.

Gentlemen: I am ordering the two extra packets of Routledge Prize Peas for two of my neighbors. They are the finest peas I have ever seen.

Respectfully,
MRS. W. A. CHILDERS.
Boring, Ore, Feb. 14, 1921.

Routledge Seed & Floral Co.

Gentlemen: We have bought seeds of you for several years and are always pleased with them. The reason you do not know me is that I come in the store for my seeds each spring.

Yours truly,

MRS. JAMES SHORT.

Remember, a little extra cost at planting time will bring "dollars" or greater satisfaction at harvest time. Packet and single pound prices only prepaid. Write for quantity price.

Highest Quality**POTATOES****True and Pure**

We offer a few varieties of special merit that we recommend. We think it is folly to plant ordinary or common stock. Many gardeners insist on the best vegetable seeds, but plant any old kind of potatoes. Get a start of some of our select seed stock and you will be more than pleased with the results.

REMEMBER.—Potato prices subject to market changes. Special prices on request. Write when ready to buy and state quantity wanted.

ROUTLEDGE IMPROVED IRISH COBBLER — True Stock

The true Irish Cobbler is extremely early, large enough to eat in six to eight weeks and under ordinary field culture the vines will die down and the full crop will be matured in 10 to 12 weeks. The potatoes are medium to large, round, slightly oblong, thick and rather blunt ends; skin white, eyes strong and well developed. Eating quality far superior to most "earlies" and equal to the best of the late kinds. A good keeper and excellent baked or boiled. Vines small, but sturdy and healthy, bloom lavender pink. Can be planted close. The ideal first early potato for the home garden or commercial planter who wants to secure "top prices" for "the first early new crop."

We have only a limited stock of our own "true strain." Order early.

Prices, not prepaid: 5 lbs. 50c; 10 lbs. 85c; 50 lbs. \$3.00; 100 lbs. \$5.50.

Note.—There is a lot of "so-called" Irish Cobbler among Oregon growers, but most are not early or true. Beware!



Awarded
first prize
Multnomah
County
Fair, 1921

Improved
Irish Cobbler

ROUTLEDGE EXTRA EARLY—A New Potato of Great Merit

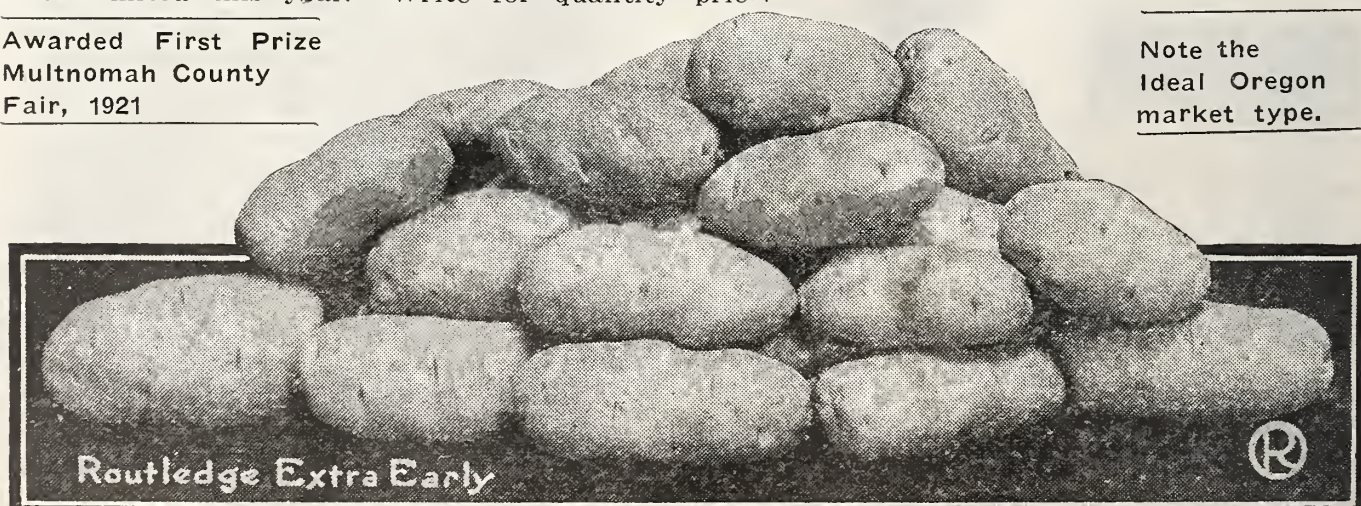
We offer this grand new variety with the greatest confidence that it will please every grower. Originally it came from the East under the name of "Early Burpee," but by careful "hill selection" our potato expert (Mr. Dahl, of Multnomah County, who has grown it for over five years), has so improved the shape, type, color and productiveness that the original could not be recognized at all in our present stock. We have contracts covering all of this stock and from now on it will be known as "ROUTLEDGE EXTRA EARLY."

DESCRIPTION: Extremely early and unusually productive; ideal in shape and size, being round and oblong (see illustration); very shallow eyes, skin smooth and silky and clear, almost a pure white. Excellent quality, either boiled or baked; cooks quickly; is fine-grained, snowy white and fluffy. No other variety equals it in this respect. Will out-yield most other extra early kinds. Vines medium size, strong, healthy and vigorous; not a diseased vine was found in our whole field this last season. It's the only oblong, white-skinned, extra early potato we have ever seen. Potato experts who inspected our field of Extra Early, as well as our Improved Irish Cobbler said they were the finest in the state.

Prices, not prepaid: 5 lbs. 60c; 10 lbs. \$1.00; 50 lbs. \$3.25; 100 lbs. \$6.00. Order early; stock limited this year. Write for quantity price.

Awarded First Prize
Multnomah County
Fair, 1921

Note the
Ideal Oregon
market type.



Routledge Extra Early

USE "BUG DEATH."—We sprayed our potatoes with BUG DEATH powder last season to PREVENT DISEASE and INCREASE THE YIELD. We think it pays. See page 121.

Potatoes—Continued

ABOUT PRICES.—Prices are subject to important market changes. Ask for quotations on larger lots, when ready to buy, and state quantity wanted. Good, true, healthy stocks of the best named Seed Potatoes are not plentiful and are always in demand.

"EARLIEST OF ALL"

Its quick growth and early maturity, combined with its excellent cooking qualities, makes it very valuable. Summer drought does not affect it, for its growth is complete before it can be injured. Plant early to obtain large size. Ready for the table nine weeks from planting, and fully matured in twelve weeks.

"Earliest of All" is a healthy, vigorous grower, not subject to blight or disease and does not make a second growth. Keeps as well as any late potato. A handsome, shallow-eyed, round, flattened, white-skinned potato of the finest table quality. Price, not prepaid, add postage if wanted by mail: 5 lbs. 40c; 10 lbs. 75c; 50 lbs. \$2.75; 100 lbs. \$5.25.



Earliest of All

EARLY ROSE

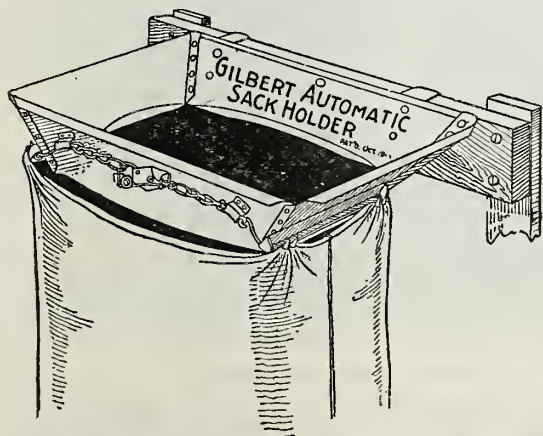
A great favorite on all markets and many growers still claim that the true stock has never been excelled in quality and productiveness. Potatoes long in shape, good size, and generally show traces of pink at the bud end. They cook mealy and are of fine flavor. Our seed stock comes from the high hill lands and produce exceptionally well in our valley.

Prices, not prepaid: 5 lbs. 40c; 10 lbs. 65c; 50 lbs. \$2.50; 100 lbs. \$4.50.

AMERICAN WONDER

One of the best all-around white potatoes; very popular for early main crop. A strong grower and a great producer; tubers white, generally very smooth and uniform in size, elongated, of excellent quality. Ready to use quite early.

Price, not prepaid: 5 lbs. 35c; 10 lbs. 65c; 50 lbs. \$2.50; 100 lbs. \$4.25; quantity price on request.



SWEET POTATO PLANTS—We can not supply "tubers" but plants are ready in May and June. See page 37 for prices.

Automatic Sack Holder

If you handle potatoes, grain or anything that goes in sacks, you need a Gilbert Metal Sack Holder. Strong and lasting.

You can hang it on a fence, a wagon-box, a grain bin, a cleat on the wall or a movable stand (make a base to set the sack on, 2 upright posts and a cross bar).

The Gilbert holds the sacks without tearing, and when full you do not have to lift them, the spring latch will drop them.

Mailing weight 5½ lbs. Each \$3.75. Postage extra.

IT PAYS TO USE "WONDER" FERTILIZER.—W. L. Richards reports a crop of 422 lbs. of large, choice potatoes from a 100-foot row where he used "WONDER" FERTILIZER, and only 138 lbs. of small "spuds" where "Wonder" WAS NOT USED. Soil and growing conditions the same. Note—He brought samples to our store.

Seed Treatment

We advise dipping of potatoes in Corrosive Sublimate before planting. Ask your state or county agricultural agent for free bulletin.

IMPROVED BURBANK

The standard and most popular commercial variety. Much of the Burbank stock is "run out" and mixed. We offer improved re-selected, healthy stock, grown especially for seed purposes; will yield much heavier than most.

Prices, not prepaid: 5 lbs. 35c; 10 lbs. 65c; 100 lbs. \$4.25; quantity price on request.

NETTED GEM

Also known as "Russet Burbank," "Yakima Gem," etc. A splendid main-crop variety. Same shape as Burbank, with a russet netted skin; flesh white, excellent quality, shallow eyes. Grown extensively under irrigation in dry sections to produce large "bakers." Selected stock.

Price, not prepaid: 5 lbs. 40c; 10 lbs. 65c; 50 lbs. \$2.50; 100 lbs. \$4.50.

PRIDE OF MULTNOMAH

Excellent variety, strong, vigorous, late grower, producing a large crop of large, long, white-skinned potatoes of fine quality, either boiled or baked. We offer best stock obtainable.

Price, not prepaid: 5 lbs. 40c; 10 lbs. 65c; 50 lbs. \$2.25; 100 lbs. \$4.25.

PARSLEY

CHAMPION MOSS CURLED.—An English strain, with beautiful moss-curved foliage; vigorous grower.

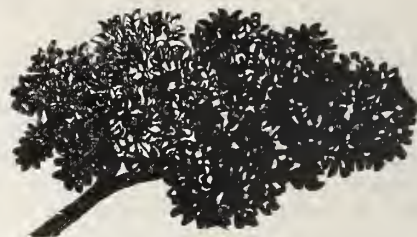
Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

ARLINGTON EXTRA CURLED.—Very choice strain, having the greatest possible curl to the leaves and the darkest green color; a very vigorous grower; will stand heat and drought better than any other.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

PLAIN LEAF.—Single-leaved variety; very fine and excellent flavor.

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. \$1.00



Moss Curled

HAMBURG TURNIP ROOTED.—The root is the edible portion of this variety and resembles a small parsnip in color and shape. Used extensively for flavoring soup, stews, etc. Foliage same as plain parsley.

Pkt. 10c; oz. 20c; 4 oz. 45c

PARSNIP

While highly appreciated for the table, the great value of the parsnip for stock feeding is but little known. The roots are very rich in saccharine food, adding to the richness of the milk when freshly dug and fed to cows.

Culture.—Sow as early in the spring as the weather will admit in drills 18 inches apart and ½-inch deep, in a rich, deep soil; thin out 3 to 6 inches apart in the rows. The quality of the roots is improved by leaving them in the ground over winter for spring use.

SWEET MARROW

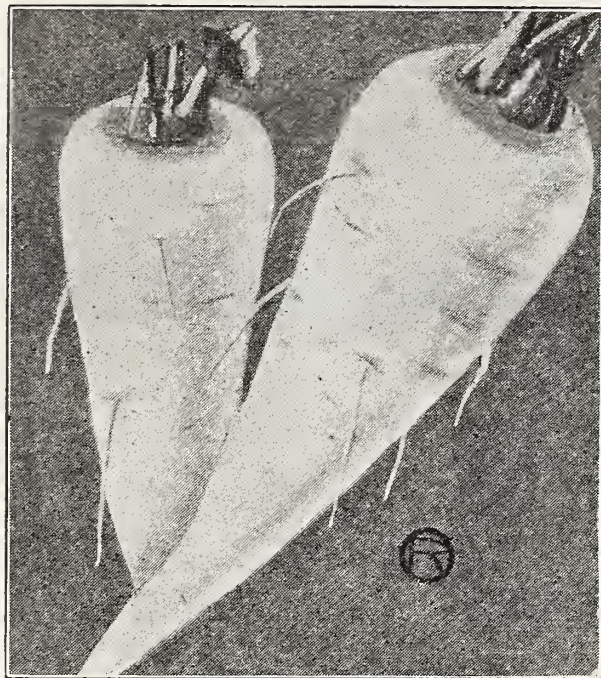
This fine new parsnip of English origin is offered with full confidence that it will become a prime favorite with all who use it. It is very fine grained and exceedingly sweet, while the peculiar "parsnip" flavor is fully preserved. The roots are unusually smooth and attractive in appearance. Recommended for private or market gardens.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

HOLLOW CROWN

The most popular variety; medium length roots, very smooth and of the finest quality. Derives its name from a depression at top of crown or root; very fine table sort.

Pkt. 5c; oz. 20c; 4 oz. 50c; lb. \$1.50



Sweet Marrow Parsnips

PEPPER

Plant seed early in the spring; culture same as for tomatoes. Plants in season. See Vegetable Plant List, page 37.

CHINESE GIANT

The largest of all the peppers; very sweet and mild. Brilliant, glossy scarlet when ripe. Excellent for stuffing.

Pkt. 15c; oz. 85c

RUBY KING

A strong, healthy grower; very productive; fruit large and well formed, and as they ripen are a handsome rich scarlet. The flesh is thick, sweet and mild. Especially fine for mangoes.

Pkt. 10c; oz. 80c

PIMENTO—Perfection

This is a sweet pepper, one which you will enjoy eating in salad, either fresh or canned. Fruit medium in size, top shaped, very thick flesh and wonderful mild flavor.

Pkt. 10c; oz. 80c

LARGE BELL OR BULL NOSE.—The plants are vigorous, compact and very productive, early and mild; fruit large, bright crimson when ripe.

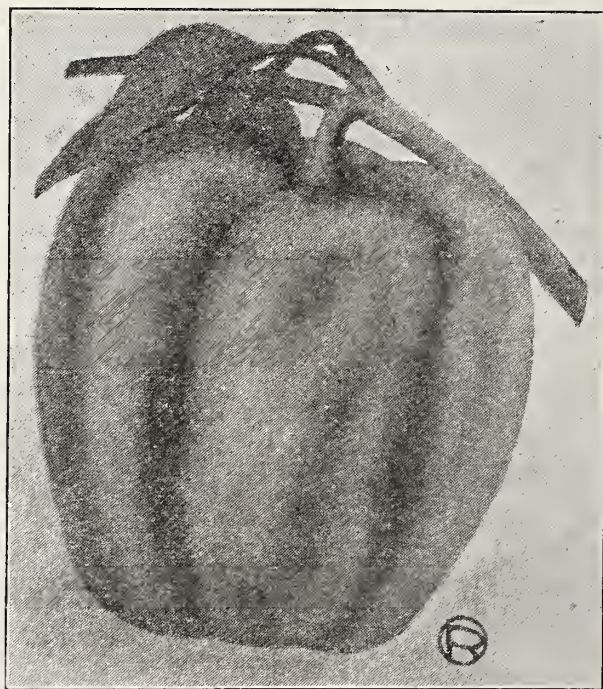
Pkt. 10c; oz. 65c

RED CHILI.—A small, pointed, bright red variety. The pods are used in making chili and pepper sauce, and are very pungent and hot; very productive.

Pkt. 10c; oz. 80c

CAYENNE.—Long, red, pointed pods; very strong and used largely for making pepper sauce; popular variety.

Pkt. 10c; oz. 80c



Ruby King Pepper

CHERRY RED.—Rich, glossy, scarlet fruit at maturity; small, smooth and round; of dwarf habit.

Pkt. 10c; oz. 85c

POSTPAID.—All seeds in packets and single pounds are postpaid. You can't afford to send East. We save you time and money.

PEANUTS



Peanuts

As we have had many calls for peanuts for planting and know that they do fairly well in the Northwest, we offer two good kinds.

Culture.—Remove the shell carefully so as not to break the skin and plant 10 inches apart in rows; cover 2 inches. Warm, sandy, rich loam soil is best. When grown, pull up and dry in the sun.

IVERSON'S IMPROVED.—Early, large and productive, yielding few imperfect pods and less "pops" than any other sort.

Large Pkt. 10c; 4 oz. 25c; lb. 60c

EARLY SPANISH.—Although small, this variety is especially adapted to the North. Yields heavily; pods solid and unusually well filled. Sweeter and more delicious than the larger varieties.

Large Pkt. 10c; 4 oz. 25c; lb. 60c

PUMPKIN

DOUBLE THE YIELD AND SIZE OF YOUR PUMPKINS by using a handful of "WONDER" Fertilizer to each hill and be sure you mix it well with top soil. (See page 38.)

WINTER LUXURY.—An enormously productive variety of medium size and superior keeping qualities. Of rounding shape, 8 to 10 inches in diameter; golden russet color, finely netted. Rich, deep golden flesh; sweet and tender. Best for pies.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

SMALL SUGAR.—Fine grained, very sweet and excellent keeper. Skin deep orange yellow.

Pkt. 5c; oz. 20c; 4 oz. 50c; lb. \$1.50

KING OF MAMMOTHS.—The largest of all; grow this variety to win the prizes at the fair.

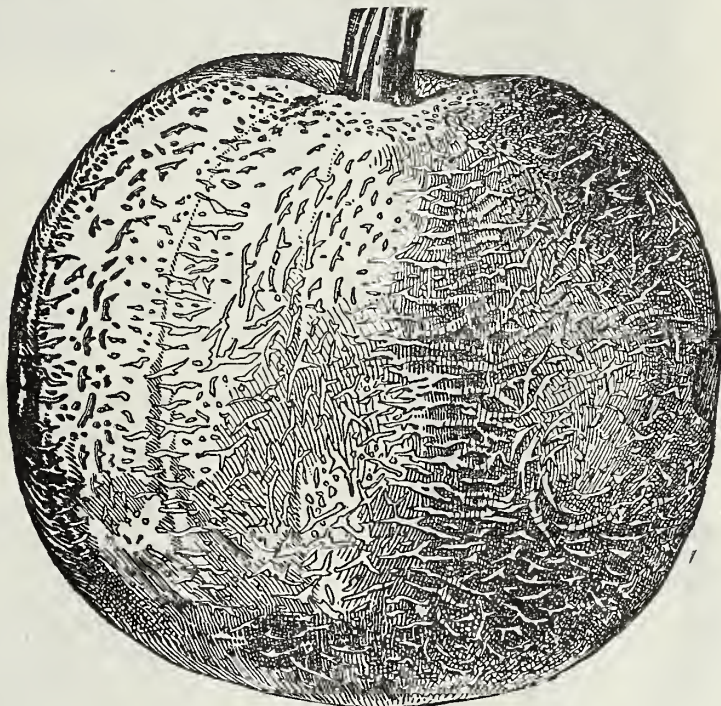
Pkt. 10c; oz. 25c; 4 oz. 60c; lb. \$1.75

CONNECTICUT FIELD.—Popular for field culture and excellent for stock.

Pkt. 5c; oz. 20c; 4 oz. 45c; lb. \$1.25

LARGE SWEET CHEESE.—A very large variety; fruit flattened, yellow when ripe. Flesh yellow, thick and tender; very nutritious and of excellent quality; a most productive variety. Very hardy.

Pkt. 10c; oz. 20c; 4 oz. 45c; lb. \$1.25



Winter Luxury Pumpkin

RHUBARB

(OR PIE PLANT)

BURBANK'S CRIMSON WINTER.—The new variety. Has a delicious fruity flavor. Very popular in California, but not in Oregon. Pkt. 10c; oz. \$1.00; 4 oz. \$3.00

VICTORIA, OR MAMMOTH.—Very large; excellent variety.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

RHUBARB ROOTS.—From October to June. Customers will save much valuable time by ordering roots instead of seed. For prices, etc., see page 115.

WINTER RADISHES

The merits of Winter Radishes are little appreciated. These grow to large size and keep well for winter and spring use. Sow seed in July and August. Early planting is not advisable.

NERIMA — Japanese Long White

A late fall and winter radish. It grows from 12 to 30 inches long and about 2 inches in diameter. Skin white and smooth, flesh firm, crisp, tender and mild.

Pkt. 10c; oz. 25c; 4 oz. 75c; lb. \$2.25

LONG BLACK SPANISH.—Very popular; latest, as well as the hardiest. Roots of medium size, oblong, black.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

ROUND BLACK SPANISH.—Three or four inches in diameter; flesh white; good keeper.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

CALIFORNIA MAMMOTH WHITE.—Also called Chinese White Winter or Celestial. A long, thick, stump-rooted variety. Pure white. The flesh is tender and crisp, keeping well through the winter.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

SAKURAJIMA.—Japanese variety that grows to an immense size, almost globe shaped. The skin is smooth and white, and the flesh is always mild, crisp and tender.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

CHINA ROSE.—Bright rose color, flesh firm and piquant, largest at the bottom. One of the best. Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

DON'T grow WORM-EATEN Radishes. Use "Mag-o-tite"—New Discovery; see page 121.

"Highest
Quality"

RADISH—Continued

"Highest
Quality"

REMEMBER.—For a continuous supply of crisp, tender Radishes, sow seed every week, as they remain in "prime" condition only a few days after attaining full size. Use "C-M."



R. R.'S SCARLET GEM.—The finest early strain of the round, bright-red radishes. The skin is bright scarlet, flesh pure white, crisp, tender and of delicious quality.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

SCARLET TURNIP, WHITE TIPPED.—A beautiful variety; deep scarlet, with white tip. Very early, crisp and delicious. Very popular as a market sort. (No. 5.)

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

EARLY SCARLET TURNIP.—Small top; of quick growth; mild and crisp. Very popular.

Pkt. 5c; oz. 20c; 4 oz. 45c; lb. \$1.25

FRENCH BREAKFAST.—Very popular; crisp, tender and mild; grows about 2 inches long, stump rooted, tipped white. (See cut No. 7.)

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.25

SCARLET GIANT ("Crimson Giant").—The largest early scarlet, globe-shaped radish. Flesh sparkling white, solid, crisp, juicy and mild. (See cut No. 6.)

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.50

WHITE ICICLE.—It is not only crisp and tender when young, but retains these qualities until the roots attain large size. It is ready for use almost as quickly as the early turnip-shaped sorts. (See cut No. 3.)

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$1.75

LONG BRIGHTEST SCARLET, WHITE TIPPED.—The brightest and handsomest long scarlet radish. Of excellent quality. (See cut No. 1.)

Pkt. 10c; oz. 20c; 4 oz. 45c; lb. \$1.25

EARLY SNOWBALL (Model White Box).—Early, clear white, solid, juicy, crisp, tender and unsurpassed in flavor. (See cut No. 4.)

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. \$1.00

LONG SCARLET.—Grows perfectly straight and smooth, 6 to 7 inches in length; skin scarlet, very thin; the flesh crisp, brittle and of delightful flavor. (See cut No. 2.)

Pkt. 5c; oz. 10c; 4 oz. 30c; lb. \$1.00

WHITE STRASBURG.—Crisp and tender; roots grow 4 to 5 inches long and about 2 inches in diameter. One of the best large summer sorts.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25

DON'T GROW WORMY RADISHES. There is no use of it, since we offer Mag-o-tite. It will positively keep the worms away from the roots and is very inexpensive to use. See page 121.

SUNFLOWER

MAMMOTH RUSSIAN.—The best variety to grow for the seed, which is used as a food for poultry and parrots. It also makes a good hog feed. Sunflower seeds are rich in oil and protein. Planted in or around the poultry runs they make a good shade during the hot summer days and at the same time produce a valuable feed.

Recently sunflowers have been grown extensively for silage feeding purposes. Yields an enormous amount of feed, said to be equal to corn; not affected so much by frost, and grows well even where corn makes a poor crop. Ask your experiment station for a bulletin on this subject. Cultivation same as corn. For silage sow 12 to 20 lbs. per acre; for seed purposes, where plants must be given much more space to mature heads, 5 lbs. per acre. Heavy, re-cleaned seed, high germination.

Pkt. 5c; oz. 10c; 4 oz. 20c; lb. 40c; 10 lbs. \$3.00, postpaid. Write for quantity price

EVER USE A LANTERN? If you do, investigate **DAD'S ELECTRIC**—always ready—no danger from fire; makes "night time a light time." See page 129.

SALSIFY OR VEGETABLE OYSTER

One of the most desirable winter vegetables. The roots when cooked are very palatable and nutritious and are served in a variety of ways. The flavor is similar to oysters. Salsify succeeds best in a light, well enriched soil, which should be stirred to a good depth. Coarse and fresh manure should be avoided, as it will surely cause the roots to grow uneven and ill-shaped. Sow early and quite deep, giving the general culture recommended for parsnip. The roots are perfectly hardy and may remain out all winter. Frost does not injure the roots; may be stored in a pit or in a very cool cellar.

MAMMOTH SANDWICH ISLAND

This variety is large and strong, growing with long, smooth, white, tapering roots, and is less liable to branch than the other sorts. It is invaluable for market gardeners' use. Pkt. 10c; oz. 30c; 4 oz. 90c; lb. \$2.75

SPINACH

Plant in the richest soil you have very early in the spring or not until fall for winter use, as it does not do well in hot weather.

IMPROVED THICK-LEAVED.—A variety which grows very rapidly, forming a cluster or large, very thick, slightly wrinkled leaves of fine color and quality when cooked; best for market gardeners.

Pkt. 10c; oz. 20c; 4 oz. 40c lb. 75c

NEW ZEALAND.—Unlike true spinach in type and in that it thrives during hot weather and in any soil rich or poor. The tender shoots are of good quality and may be cut throughout the summer. The plant becomes quite large and spreading. The leaves are comparatively small, broad and pointed. Germination of the seed can be hastened by soaking in warm water twenty-four hours.

LONG STANDING.—An improved variety of excellent quality for general use; slow going to seed. Remains in good condition longer than most. Dark, rich green.

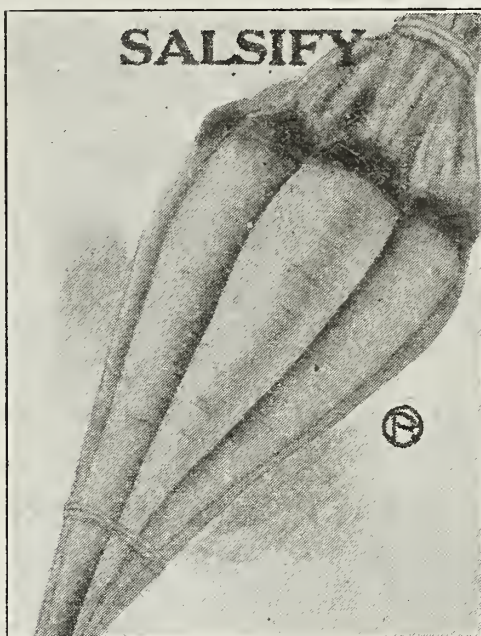
Pkt. 10c; oz. 15c; 4 oz. 35c; lb. 75c

BLOOMSDALE SAVOY LEAVED.—Very early; of upright growth; leaves broad and pointed, dark green, fine quality; grows quickly. Good for all seasons.

Pkt. 10c; 1 oz. 20c; lb. 75c

PRICKLY WINTER.—Very desirable; very hardy and easily grown; bears large, smooth, broad pointed leaves. Color, bright green. A fine winter and spring variety.

Pkt. 10c; oz. 25c; 4 oz. 40c; lb. 85c.



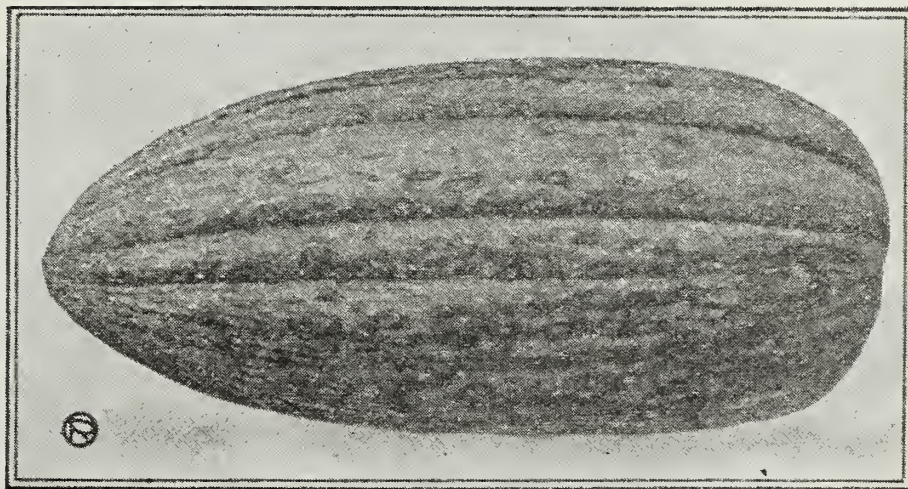
Improved Thick-Leaved

SQUASH

Delicata Squash

A perfect all-season squash. A summer and fall crop on one plant. Produces 15 to 20 fruits to a vine; very fine flavor and quality.

It is ready almost as soon as the early summer sorts. Of excellent flavor and remains in perfect condition a long time. The fruits are about 9 inches long, and as shown in the cut, slightly ribbed. When ripe, the ground color is deep yellow, irregularly striped and marbled with dark olive-green.



Delicata Squash—Try It

The flesh is thick, of fine texture, and pale-yellow in color. It is unexcelled for baking—the shape and size make it perfect for this purpose. When boiled it turns out dry, mealy and sweet. Excellent for pies.

Pkt. 10c; oz. 25c; 4 oz. 65c; lb. \$1.75

Make liquid manure from "C-M" (pg. 38) and give each hill a quart or two occasionally during hot weather. The results will surely surprise you.

SQUASH—Continued

Mammoth White Bush Scallop

The fruit is a beautiful, clear, creamy white; superior in size and beauty, and is quite uniformly warted. The handsomest of the scalloped squashes. The stock we offer is exceptionally true to type. Pkt. 10c; oz. 20c; 4 oz. 45c; lb. \$1.50

Golden Summer Crookneck

Early and very prolific. The fruits are of the true crook-neck type, heavily warted and of light golden color. One of the most popular sorts for home and market.

Pkt. 10c; oz. 20c; 4 oz. 40c; lb. \$1.25

VEGETABLE MARROW.—Long White Bush. A very popular sort abroad and can be raised equally well here. Is long and slim, color white, with delicious white flesh.

Pkt. 10c; oz. 20c; 4 oz. 40c; lb. \$1.50

YELLOW BUSH SCALLOP.—A very early, flat, scallop variety of large size; color yellow; flesh pale yellow and well flavored.

Pkt. 5c; oz. 15c; 4 oz. 35c; lb. \$1.25

FALL AND WINTER VARIETIES

BOSTON MARROW.—A popular variety for canning; large oval fruit; skin bright reddish orange, with light cream netting; flesh rich orange, fine grained and of excellent quality.

Pkt. 5c; oz. 20c; 4 oz. 45c; lb. \$1.25

Mammoth Chili

The largest of all squashes, growing to an enormous size, often weighing over 200 pounds while its rich, fine flavored flesh insures its value for all purposes. Its size makes it valuable for stock feeding. Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$2.00

Golden Hubbard

The same in size, shape and quality as the well-known Hubbard Squash, except that it is a bright red or golden color and somewhat earlier. It is also a long keeper; considered by expert judges to be one of the very best fall and winter sorts yet introduced. Matures before the frosts; is vigorous and wonderfully productive. In flavor it has no equal.

Pkt. 10c; oz. 20c; 4 oz. 65c; lb. \$2.00

Delicious

Finer-grained and more delicious than the well-known Hubbard. The color of skin is green or blue-black. Medium size, weighing from 5 to 10 pounds. The shell is not very thick, but is hard and strong; small seed

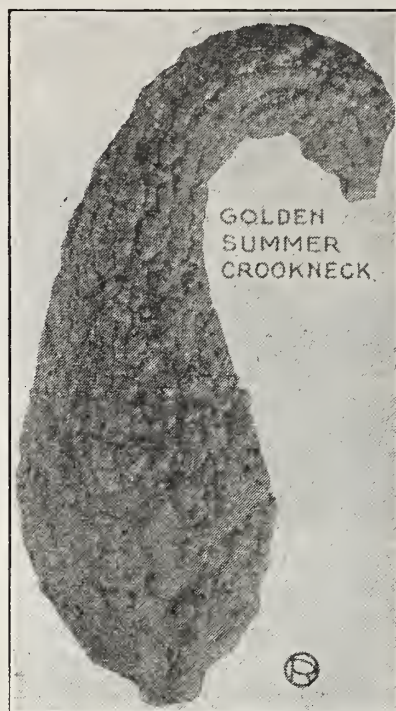
cavity; the flesh is very thick, of a bright yellow color, fine-grained and of splendid quality. For table use, either as a fall or winter squash, it cannot be excelled.

Pkt. 10c; oz. 20c; 4 oz. 50c; lb. \$1.75

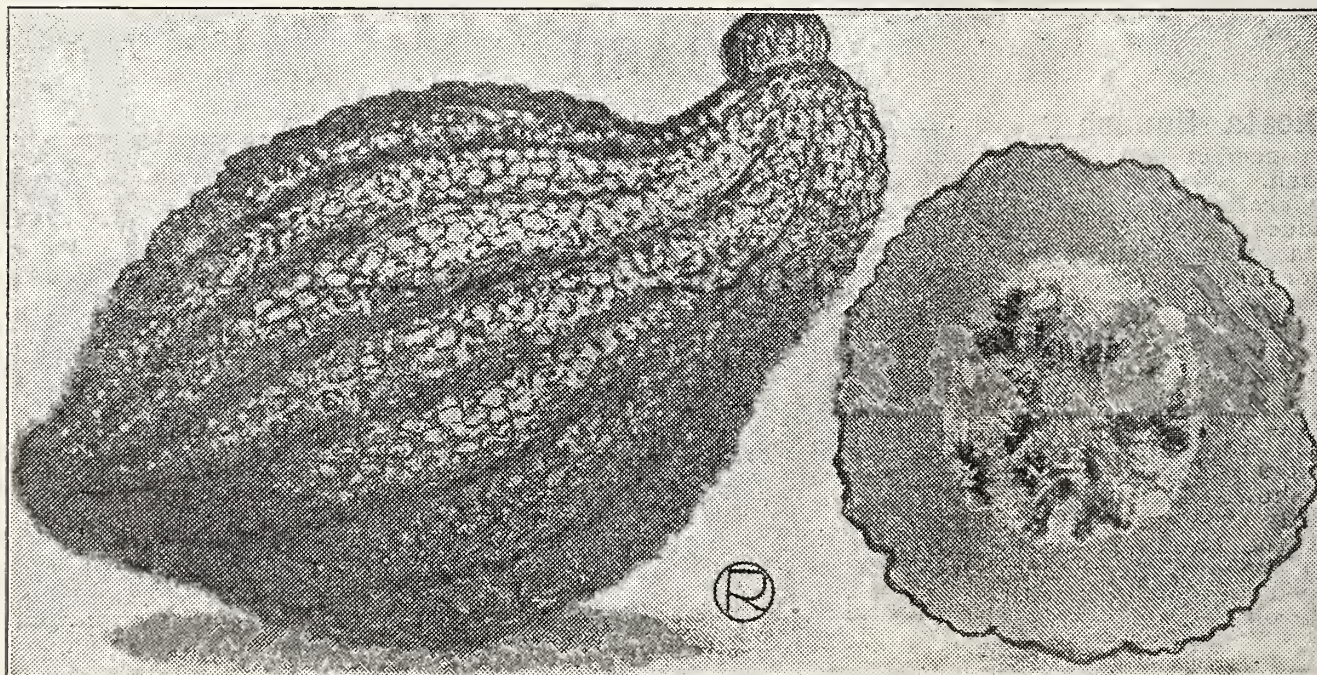
True Hubbard

One of the best of the winter squashes. Vines vigorous and very productive. Fruit large, heavy, moderately warted with very hard shell. Skin uniformly dark bronze-green. Flesh bright orange-yellow, fine grained, thick, dry and richly flavored. Can be kept in good condition until spring. Our seed is carefully selected and is much superior to most offered.

Pkt. 10c; oz. 20c; 4 oz. 60c; lb. \$2.00



See DAD'S ELECTRIC LANTERN, page 129



True Hubbard.—Note the thickness of the flesh

DOUBLE the yield of your squash by using a cupful of "WONDER" Fertilizer to each hill. (See page 38.) You know the richer your ground, the larger the yield, and Wonder Fertilizer certainly contains more plant food than any other brand.

TOMATO

Tomato Plants in any quantity. See Vegetable Plant list, page 37



USE
BUG
DEATH
on
Tomatoes.
See pg. 121

New Burbank

A wonderful new creation, claimed to be the earliest, smoothest, solidest, most productive. Bright scarlet, skin peels freely.

Pkt. (about 200 seeds) 15c; 4 for 50c; write

Bonny Best

Highly prized by many Oregon growers. Tomatoes large, smooth and of a rich scarlet red, the color that sells quickly. Fruit thick with a small core, a profitable tomato for any purpose. Slices exceptionally well. Flesh and flavor excellent. Nearly globe shaped, slightly flattened at stem. Borne in clusters of 5 to 6 fruits all ripening evenly together. Very productive and one of the very earliest.

Pkt. 10c; 1/2 oz. 25c; oz. 45c; 4 oz. \$1.50

Husk or Ground Cherry

Used for preserves and eating from the hand. The seed we offer is that of the true Yellow Ground Cherry, not the purple-fruited sort, which is scarcely edible.

Pkt. 10c; oz. 50c; 4 oz. \$1.50

TOBACCO

Culture practically same as cabbage.

Havana or Connecticut Seed Leaf.—Both good, hardy varieties for general planting here.

Pkt. 10c; oz. 75c

Comet

The Best Tomato for Greenhouse Forcing.—A recent variety, matchless in form and color. Beautiful, smooth, round fruit in great abundance. Color a rich scarlet red. Sets very freely in bunches. Equally good for outdoor culture as for forcing.

Pkt. 10c; 1/2 oz. 30c; oz. 50c; 4 oz. \$1.50.

Chalk's Early Jewel

The largest, smoothest and finest flavored, extra early bright red tomato. It is a heavy cropper with tomatoes of larger size, excellent flavor and freely produced throughout the season. The plants are of bushy, compact growth, heavily loaded with fruit. The tomatoes are just right for market; very solid and deep through, being almost round; ripening to the stem without cracks or green core. The flesh is thick, solid, of fine flavor, with few seeds.

Pkt. 10c; 1/2 oz. 25c; oz. 45c; 4 oz. \$1.50.

Routledge's Early Oregon

Very hardy and succeeds everywhere. The Early Michigan, Fordhook and Atlantic Prize were good sorts "in their day," but the Early Oregon is superior to these in shapeliness, color, size, smoothness, solidity and flavor, as well as being earlier. Those wishing to have the earliest "GOOD" tomato should raise our Early Oregon. Color a beautiful deep pink. Highly recommended for the home or market gardener. Try it.

Pkt. 10c; 1/2 oz. 25c; oz. 40c; 4 oz. \$1.35

Spark's Earliana

The earliest tall variety, forming ripe fruit much earlier than most early varieties. The fruit is large, smooth, of a bright scarlet color and of fine quality. Very valuable for early market use.

Pkt. 10c; oz. 45c; 4 oz. \$1.50

STONE.—Grown very extensively for a main crop by market gardeners; very large, smooth and solid, of a bright red color and a heavy yielder; of excellent quality and not subject to rot.

Pkt. 5c; oz. 35c; 4 oz. \$1.25

DWARF CHAMPION.—Forms a strong, erect, bushy plant 2 feet high; often sold as Tree Tomato. Fruit smooth, medium sized, solid and of good flavor.

Pkt. 10c; oz. 40c; 4 oz. \$1.50

YELLOW OR RED PEAR.—Used for preserves and to make "tomato figs." Fruit distinctly pear shaped and of excellent flavor.

Pkt. 10c; oz. 75c

YELLOW OR RED PLUM.

Pkt. 10c; oz. 75c

RED OR YELLOW CHERRY.—Fruit small, about 5/8-inch in diameter; perfectly round and smooth; fine for pickles and preserves.

Pkt. 10c; oz. 75c

Increase the yield and quality of your Tomatoes by using a good plant food. See page 38. **WONDER ODORLESS FERTILIZER** will do it; a spoonful to a plant.

HIGHEST QUALITY

TURNIPS

HIGHEST QUALITY

For spring use sow very early in rich, loose ground. They must make a quick growth to be tender and sweet. For fall and winter use sow in July, August or early September.

Beware of low-priced turnip seed this year. The country is full of cheap seed grown from small scrub field roots.

Extra Early
WHITE MILAN TURNIP
The Very Earliest

An excellent table turnip, and the earliest of all varieties; adapted for very early spring or fall planting. The tops are small; the bulbs of medium size, flattened, and ivory-white in color. The flesh is fine-grained, tender, and of a mild, sweet flavor. It remains in good condition for a long period of time, and does not become pithy or stringy.

Pkt. 10c; oz. 25c; 2 oz. 40c; 4 oz. 60c; lb. \$2.00

Early Purple Top Milan

This variety is ready for the table as early as White Milan; flesh white, firm and delicate.

Pkt. 10c; oz. 20c; 2 oz. 35c; 4 oz. 50c; lb. \$1.50

Orange Jelly, or Golden Ball

Delicate and sweet, yellow flesh, medium in size, firm, crisp and most excellent flavor; keeps well and is superior as a table variety.

Pkt. 10c; oz. 20c; 4 oz. 45c; lb. \$1.25

Early White Flat Dutch

A leading white fleshed variety; either for the family, market garden or field crop; it is medium size and produces a large crop; the flesh is firm, but tender, and of a superior rich, buttery flavor; a good keeper.

Pkt. 10c; oz. 20c; 4 oz. 45c; lb. \$1.25

Early Snowball

A superior table variety, meltingly tender, with snow-white flesh. Matures six weeks after sowing; medium size, smooth and perfectly globular.

Pkt. 5c; oz. 20c; 4 oz. 45c; lb. \$1.25

White Egg

Is perfectly smooth, of a pure clear white; a very choice kind for table use; of excellent flavor, sweet and mild; pulls clean from the ground; thin, snow-white skin. Egg shaped.

Pkt. 10c; oz. 20c; 4 oz. 45c; lb. \$1.25

Raise No More Wormy Turnips



A new and wonderful powder for destroying maggots, grubs and worms which infest Turnips and root crops.

A marked increase in vigor and growth follows its use. See page 121.

Early Purple Top (Strap Leaved)

One of the best and universally grown; flesh firm, but very tender and sweet; of quick growth; attains large size, profitable for stock, keeps well.

Pkt. 10c; oz. 20c; 4 oz. 45c; lb. \$1.00

Purple Top White Globe

A very heavy cropping, globe-shaped variety, with white skin and flesh, excellent flavor and much in favor with the market gardeners.

Pkt. 10c; oz. 20c; 4 oz. 45c; lb. \$1.25

Yellow Aberdeen

Round, medium size, light yellow; produces a large crop; is hardy and keeps well; flesh very firm, but tender and sweet; a great favorite with the dairymen for feeding cows.

Pkt. 5c; oz. 20c; 2 oz. 35c; 4 oz. 45c; lb. \$1.25

Cowhorn (Long White)

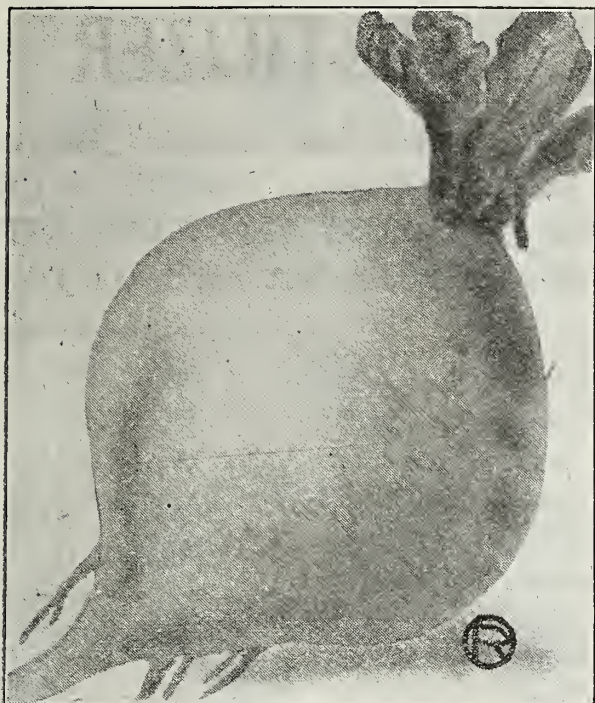
Slightly crooked, pure white, except a little shade of green at the top; grows half out of the ground and is of very rapid growth. Has proved itself one of the best stock turnips ever introduced in Oregon.

Pkt. 10c; oz. 20c; 2 oz. 35c; 4 oz. 50c; lb. \$1.50

For valuable and "up-to-date" books on Gardening and Poultry, see pages 128-129.



Extra Early White Milan Turnips



American Purple Top

RUTABAGA — SWEDES

For feeding stock in fall and winter there is nothing superior to turnips and rutabagas, as they are much liked by all kinds of stock, and serve to keep them in good condition.

Improved American Purple Top

The leading and most popular variety, being very distinct in type, attaining a wonderfully large size; immense yielder; the flesh is very firm, cream yellow, fine grained, sweet and tender. Excellent both for table and stock feeding. Keep all winter.

Pkt. 10c; oz. 20c; 2 oz. 35c; 4 oz. 50c; lb. \$1.25

White Sweet Russian

This variety is most excellent either for table or stock; it grows to a very large size; flesh white, solid, of a firm texture, sweet and rich, an excellent keeper.

Pkt. 10c; oz. 20c; 4 oz. 45c; lb. \$1.25

HERB SEEDS

Pot, Sweet and Medicinal

Herbs in general delight in rich, mellow soil. Those marked with a (*) are perennial.

All the Flowering Herbs 10c per Packet, unless Otherwise Priced.

	Oz.		Oz.
Anise.—Seeds aromatic; used medically.	35c	*Horehound.—Bitter; for tonic	75c
*Balm.—For culinary purposes; Pkt.	15c..75c	*Hysop	75c
Basil.—Sweet; for flavoring soups.....	50c	*Lavender.—True, for fragrance.....	75c
Borage.—For flavoring; also bee pasture.	50c	*Marjoram.—Sweet; for flavoring.....	\$1.00
Caraway.—For flavoring	30c	*Rosemary.—Aromatic oil	\$1.00
*Catnip.—Mild nervine	\$1.00	Summer Savory.—For flavoring	75c
Coriander.—Used for flavoring	25c	*Sage.—For tea flavorings and dressings.	75c
Dill.—Used medicinally and for pickles..	25c	*Thyme (broad leaf).—For soup	\$1.00
*Fennel.—Flavor of celery.....	35c	*Wormwood.—Medicinal use	Pkt. 75c

VEGETABLE PLANTS

We grow large quantities of choice vegetable plants, and can supply all of the varieties listed below, in their proper season, in most any quantity. We can supply all vegetable plants in two grades—plants raised direct from the seed beds and those that have been transplanted into shallow boxes. Transplanted plants are much stronger and better rooted, and are well worth the price, especially in the early part of the season. We can supply most any of the leading sorts. Tell us your choice of varieties, and we will send it or give good substitute. **NO PLANTS SENT C. O. D.** Write for prices on 5 to 10 thousand lots.

NOTE.—Dozen prices only are postpaid. We will send 100 and 1,000 lots by express at your expense, unless you wish to send 35c extra per hundred to pay packing and postage. Tomatoes 50c per 100 extra. Pot-grown tomato plants should have all the dirt left on the roots and are not mailable.

CABBAGE AND GARDEN KALE

	Dozen	100	1,000
Transplanted	\$.25	\$1.00	\$8.00
Not transplanted		.75	7.00
Cow kale		.75	6.00

CAULIFLOWER AND BROCCOLI

	Dozen	100	1,000
Transplanted	.30	1.25	10.00
Late kinds, transplanted...	.30	1.00	8.50
Late, not transplanted		.75	7.50

CELERY AND CELERIAC T. R.

	Dozen	100	1,000
Leading kinds, transplanted.	.30	1.25	8.50
Not transplanted		1.00	7.50

SWETT POTATO PLANTS

	Dozen	100	1,000
Sweet Potato Plants	\$.35	\$1.25	\$9.00

TOMATOES

	Dozen	100	1,000
Leading kinds, our selection, transplanted	.35	1.25	8.50
not transplanted		1.00	7.50

Pot Grown Tomato Plants.—These large plants give the most profitable results. Can not be mailed. Prices: 3-in. pots, 15c each, \$1.50 doz.; 4-in. pots, 20c each, \$2.00 doz.; must go by express, charges collect.

Chives (Schnittlauch).—Per bunch, postpaid, 25c.

Orders filled once every six days during May and June.

WONDER ODERLESS FERTILIZER

The best fertilizer for the city gardener; clean and odorless. Remember, it's **ALL FERTILIZER**; a wonder in action, a giant in strength, and the small amount necessary to use makes it the **CHEAPEST AND MOST EFFICIENT** High Grade Fertilizer on the market, and last, but not least, **IT IS ODORLESS**. We buy it in carload lots.

In "**WONDER**" you get the "best" in plant food, something which gives results, something that astonishes. This "**WONDER**" fertilizer is the result of years of study and trials by a fertilizer expert. In "**WONDER**" we have a meritorious and **ODORLESS** concentrated fertilizer, put up in small packages, thereby making its distribution a cheap and easy matter. Being a concentrated fertilizer, only a very small amount is required to produce the largest yield. (See general directions below.) There's no use of your paying dray and freight charges on bulky fertilizers containing three-fourths sand, ash or dirt filler. "**WONDER**" is the pure "**DOPE**"—clean and easy to apply. We guarantee it to give results.

The small amount of "**WONDER**" required reduces the expense of fertilizing to about one-half the cost of green manure or the average commercial fertilizers on the market. Rich in potash.

The "**WONDER**" fertilizer is sold only in 25-lb. white, clean canvas bags, 2-lb. odorless cartons and 125-lb. sacks.

Price of "Wonder" Fertilizer

TWO LB. CANS, Not Postpaid, 30c (P. P. Wgt. 2½ lbs.)
25-lb. DRILL BAG, \$2.35; **3 Bags**, \$7.00; **large 125-lb. sack**, \$10.50.

NOTE.—If wanted by parcel-post add postage. "**Wonder**" is odorless and 2-lb. cans and 25-lb. bags can go by mail cheaper than express or freight in most cases.

General Directions for Using Wonder

Remember, a 25-lb. bag of "**WONDER**" is equal, in plant food, to 100 lbs. of most any other commercial fertilizer on the market.

For Ferns and House Plants: One-half teaspoonful to a 6-in. pot, dug into the top soil; 1 teaspoonful, heaping, when repotting, mix well through the soil.

For Vegetables: A teaspoonful to a Cabbage, Tomato, Cucumber, Pumpkin or Melon Vine. Sprinkle over the top soil before planting Radish, Lettuce, Peas, etc., or hoe in after they are up. **For Flowers outside:** A very little to each plant, or cultivate into the top soil before or after planting. Use 1 lb. to 10 foot square.

For the Lawn: One 25-lb. bag of "**WONDER**" will go over a space of your lawn 50x50 or 2,500 square feet, and is sufficient for same, applied once yearly. In dry weather always water after applying. Double the amount when making new lawns.

For Fruit, Roses, Etc.: A heaping tablespoonful for a small Fruit, Berry, or Rose Bush, a cupful for a 3 or 4-year tree; 1 to 3 lbs. to a full bearing Fruit Tree, large Flowering Shrub or Vine.

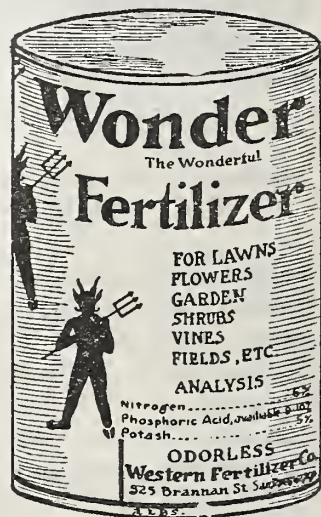
CAUTION! Always mix the fertilizer into the top soil as much as possible, and water or sprinkle after applying it, especially on grass or tender foliage or growth.

Ask for "**WONDER**" **20-PAGE BOOKLET** that gives plain facts and full information and directions for all purposes. **FREE.**

NOTE.—Three sacks of "**C. M.**" (see next page) and one sack of "**Wonder**" mixed together will make a very rich combination fertilizer that will prove highly satisfactory for all uses, as it will be very **rich in plant food** and supply the **necessary humus** for heavy soils.

Hundreds of our customers praise "**Wonder**" and buy it every year. You try it and be convinced. Your report, please.

~~~~~  
 Ask for  
 8-Page  
 "Wonder"  
 Leaflet—It  
 Tells All  
 ~~~~~





Kiln-Dried Pulverized Cow Manure

For Short, We Call It "C. M."

This product is made of green cow manure by putting it through a dry-kiln with heat enough to evaporate the water and kill all weed seed without burning the compost or destroying the fertilizing elements. It is then ground finely and sacked.

Hundreds of our Gardeners and Farmers have discovered its great value, and are buying large quantities.

Supplies the "Humus" lacking in chemical fertilizers and the analysis shows it to be quite rich in nitrogen, potash and phosphoric acid. It will not burn or harm the most tender seeds or plants.

EIGHT TO ONE.—You can get a good idea of the value of this concentrated product when we state that it takes 8 to 10 tons, in the green or natural state, to make 1 ton ready to sack. We are offering, in a most convenient dry state, a fertilizer and compost that heretofore you have bought by

the wagon load, in a most dirty, foul and disagreeable form.

SUPPLIES THE HUMUS.—This new product supplies all the humus and fertilizing value of the old form, without the disagreeable odor, coarse straw, chaff and weed seeds. In fact you get everything in an ideal form except the live weed seed and moisture. You do not want the weeds and can easily apply water when needed. There is no use of paying dray, freight or handling charges for dirty, foul, water-soaked manure when this product can be had.

CHEAPER AND MORE CONVENIENT.—The old form cow manure costs about \$3.50 a load delivered and about \$3.00 or more to get it placed and spaded under. Three sacks of our Dry-Kiln C. M., which is practically odorless and can be spread around by anyone at leisure, will cost less and give better results. It contains no live weed seeds.

Uses and Directions for "C. M."

FOR ROSE BEDS AND BORDERS FRUIT AND BERRY BUSHES GRAIN FIELDS AND MEADOWS

Apply "C. M." broadcast at the rate of 3 to 5 sacks per city lot; for large fields, 20 to 30 sacks per acre. It will pay to use it liberally.

FOR SEED BEDS

As a top dressing over seed beds, where small flower or vegetable seeds are to be started, nothing else could be better, as it is full of "humus" (like leaf-mold) which keeps the top soil loose and open. Rake "C. M." into the top soil, or after seeding sprinkle "C. M." over the surface, and moisten it well.

FOR VEGETABLES AND FLOWERS

Use "C. M." on any soil that needs loosening up and enriching. To raise choice vegetables and large beautiful flowers, the soil must be rich, well worked and loamy. Use "C. M." in liberal quantity and you will be delighted.

FOR LAWNS

"C. M." is just what has been wanted for years by amateur and professional lawn-makers. Heretofore on account of heavy soils that would bake and crack, the best cow manure obtainable was used to open up and keep the soil loose. It was not the plant food needed, as that could easily be applied in the form of Chemical Fertilizer, but it was the "humus" in the stable manure that was wanted, but NOW with this Dry-Kiln, weed free, "C. M." the lawn-maker's troubles are greatly reduced.

HOW TO USE.—After the lawn has been graded, raked, seeded and rolled, spread "C. M." broadcast over the seed, covering it well. If it is dry weather, sprinkle, but sprinkle lightly, but often, so as not to wash it off. It absorbs much water, but slowly at first. After it is once wet it becomes part of the surface soil and will remain.

ANOTHER WAY.—Providing you will use "C. M." in a liberal amount, it would be better raked into the surface soil, then seed, rake lightly and roll.

PRICES OF DRY-KILN "C. M." AT OUR STORE

Two Bushel (72-lb.) Sacks, \$2.00; 3 Sks., \$5.50; 5 Sks., \$9.00; 10 Sks., \$17.50; 20 Sks., \$32.50; 28 Sks. (1 Ton), \$40.00. Small lots—2 Lbs., 15c; 5 Lbs., 25c; 10 Lbs., 40c; 30 Lbs., \$1.00.

With our new fertilizer Dry-Kiln "C. M." to supply humus, and "Wonder," the strongest and richest odorless chemical fertilizer and "Ground Lime," the great soil conditioner, we have a combination that will supply every need. (See pages 38 and 40.)

The day of strong smelling, odorous fertilizers is over, we believe, at least for the city and suburban gardener.

For Liquid Manure.—Empty half a sack of "C. M." into a 50-gal. barrel and fill with water. Use this liquid straight or diluted form, for watering. The increased vigor and growth of plants will almost immediately be noticed.

FERTILIZERS—Continued

Fertilizer prices on this page subject to market changes. Write for quantity price.

GROUND LIME ROCK

Lime is an indirect soil improver and a very valuable conditioner, and releases the plant foods. Its application on heavy or clay soil will open it up, make it lighter and more workable. Few people realize its value. Most Western Oregon soils need lime. Use $\frac{1}{2}$ to 1 ton per acre. For heavy clay soil in the garden, double the amount.

Prices: 100-lb. sacks, \$1.25; 500 lbs. \$5.00; write for ton prices.

GARDEN LIME

(Fertilizer Lime.)—This is put through a process that makes it finer and lighter than above. Quicker in action, richer in calcium, and well worth the higher price. Excellent for moss in lawns and general garden and farm lands.

Prices: 5 lbs. 25c; 10 lbs. 40c; 50 lbs. \$1.00; 100 lbs. \$1.75; 500 lbs. \$7.50; write for ton price.

SHEEP GUANO

One of the best natural manures, dried and ground. Concentrated, soluble, quick in action, and free from weed seed. Splendid for vegetables; fine for roses and flowers. Excellent for lawns, small fruits, berries, etc., but we really prefer "C. M." See page 39.

Prices: 100 lbs. \$2.00; 500 lbs. \$8.75; write for low prices for ton or carload.

NITRATE OF SODA

It is very quick in action, stimulating rapid growth. Being quickly soluble, it should not be applied until spring, on garden truck after the plants are above ground. Be careful or it will burn tender foliage.

Prices: Lb. 15c; 5 lbs. 50c; 25 lbs. \$1.50; 100 lbs. \$4.00; write for quantity price.

SULPHUR POWDER—FERTILIZER

Experiments conducted during the past few years by noted soil chemists and practical cultivators have revealed the fact that sulphur kills alkali, promotes nitrification, transforms potash and phosphates lying latent in the soil into available plant food, thereby reclaiming and stimulating the soil to produce greatly increased crops at a comparatively low cost per acre. Ask any agricultural college or experimental station. Use 200 to 300 lbs. per acre broadcast and harrow it in. It will prove a good fertilizer and act as repellent against fungus, mildew, rust, wilt and blight.

Prices: 1 lb. 10c; 5 lbs. 40c; 10 lbs. 75c; 50 lbs. \$2.25; 100 lbs. \$4.00, subject to change. Write for quantity prices.

SUPERPHOSPHATE

This is what is known as acid phosphate, being phosphate rock that has been treated or processed, to make the phosphoric acid available. Has become very popular among grain and fruit growers. Use at the rate of 300 lbs. and up per acre.

Prices: 100-lb. sks. \$2.35; 5 to 20 sk. lots at \$2.10.

LAND PLASTER

(Gypsum.)—An indirect fertilizer as it releases plant food and changes soil conditions. Used largely on grass and clover crops.

Prices: 10 lbs. 25c; 50 lbs. 75c; 100 lbs. \$1.25; 500 lbs. \$5.00. Low ton price, write.

BONE MEAL FERTILIZER

This is finely ground and of best quality. Used for lawns, roses, shrubs and trees. Not very quick in action and should be applied in the fall or very early spring. Use 1,000 to 2,000 lbs. per acre.

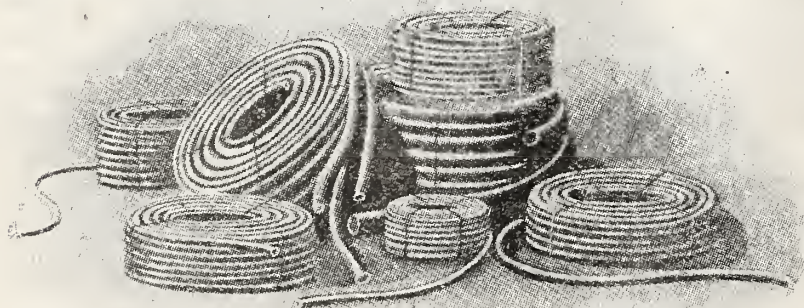
Prices: 5 lbs. 30c; 10 lbs. 50c; 100 lbs. \$3.00; ton, write.

Spray and Garden Hose

We offer new stock only of high-grade hose for spray pumps and garden purposes. We advise our customers to buy the best. It is cheapest in the end. Don't buy old stock.

ROUTLEDGE H. Q. (Non-Kinkable).—Guaranteed. This hose gives excellent satisfaction. Good enough for any ordinary spraying outfit, and by far the best hose for florists' or gardeners' use. One customer reports that he used a 50-foot length of this grade for 3 seasons continuously, which proves that it is the cheapest hose to buy. We have this on 500-foot reels, and cut any length wanted.

Price per foot, smooth or moulded, $\frac{1}{2}$ -inch, 15c per foot; $\frac{3}{4}$ -inch, 13c; corrugated, 1c per foot higher. (Couplings free on 50-ft. lengths.)



Garden and Spray Hose

LAWN MOWERS

Space in this catalog does not permit us to list the Lawn Mowers we handle, but if you can call we will be glad to show you good, easy-running kinds, priced very reasonable.

Garden Tools and Supplies of all kinds.

PLANT SMALL FRUITS around your garden. What's nicer than delicious, fresh fruit, fresh from your own garden? See Fruit Department, pages 106 to 115.

We Recommend and Sell

Mulford Cultures

FOR LEGUMES

To supply or increase the nitro-gathering bacteria in the soil



These alfalfa plants were sown same day in the same soil. Illustrations tell their own story.

Mulford experts claim an "ALL-CROP" culture is not practical.

Always inoculate seed (or soil) with the MULFORD NITRO-GERM CULTURE before planting Garden or Field Beans and Peas, Sweet Peas, Alfalfa, Clovers, Vetch and other field or garden legumes.

It means great increased crop and improved soil.

The MULFORD CULTURES contain nitrogen-fixing bacteria, which form nodules on the roots of field and garden legumes that act by collecting nitrogen from the air and converting it into nitrates—food for soil and plants. It puts more into the soil than the growing crops need and it won't leach out; enriches the soil for succeeding crops of all kinds. Government tests have proved this scientific method of immense value to farmers and truckers.

Failure to produce satisfactory crops of Clover, Alfalfa, Vetch, Peas, Beans and other legumes, is more often attributable to lack of the necessary bacteria in the soil than merely to poor soil.

When these germs are present in sufficient numbers, small nodules form on the roots of leguminous plants, as shown, in accompanying cut, and the nodules store up the nitrogen which is drawn from the air by the plant.

Without these germs a good crop is impossible. Therefore always inoculate the seeds mentioned at planting time with the MULFORD CULTURES, which contain active nitrogen-fixing bacteria. The bacteria in this product have all been proved by actual test to be active and vigorous. It is easily and quickly used by mixing with water and applying to the seed or soil; the directions which accompany each package are so complete and explicit that anyone can use it.

MULFORD CULTURES are "DIFFERENT" and should not be confused with other brands. The count is different (bacterial counts show fully twice as many bacteria as in the old-form cultures). The bottle is different (being sealed—an important feature which prevents all possibility of contamination from the outside air).

Increase Your Crops—Improve Your Soil

Legumes offer the best-known means of maintaining soil fertility and rejuvenating over-cropped and worn-out fields. They add both humus and nitrogen to your soil and thus increase your yield of non-legume crops.

The U. S. Department of Agriculture and many State Agricultural Experiment Stations recommend inoculation of legumes with nitrogen-fixing bacterial to induce a prompt "catch" and increase your yield.

MULFORD CULTURES are scientifically prepared and tested by experts, in the biological laboratories of H. K. Mulford Co., Philadelphia, with the same degree of care as Mulford Antitoxins, Serums, Vaccines, etc., which are standard all over the world.

REMEMBER—Be sure to specify the particular legume on which you desire to use the Mulford Cultures, otherwise we will not know how to fill your order. We have it for Alfalfa, Red Clover, White Clover, Sweet Clover, Alsike Clover, Field Peas, Vetch, Garden Peas, Garden Beans and Sweet Peas.

PRICES—Quarter acre size, 75c; 1 acre size, \$1.50; 5 acre size, \$5.00, postpaid.

GARDEN SIZE, only for Sweet Peas, Garden Peas, Garden Beans, 35c; postpaid 40c

THE MULFORD EXPERTS DO NOT BELIEVE IN AN "ALL-CROP" CULTURE.

MULFORD'S 12-PAGE LEAFLET TELLS ALL. SENT UPON REQUEST.



ABOUT PRICES READ THE FOLLOWING ABOUT PRICES

Only one grade priced, the best, choice, clean seed. Write for prices in quantity.

Single pound prices on Grass and Clover Seeds are prepaid. Prices per ten, fifty and one hundred pounds are not prepaid and are subject to market changes. For reference tables, amount to sow per acre, see inside back cover.

YOU WILL ALWAYS GET YOUR MONEY'S WORTH

Prices on Grass and Field Seeds change occasionally, therefore we cannot print prices good for any length of time. When ready to buy, write us for special prices, stating quantity wanted, or order what you want at catalog prices, and we guarantee that we will give you full value for the money sent, whether the price at the time you order be higher or lower. In other words, we will always ship seed to cover the full amount of money sent to us.

FOR AMOUNT TO SOW PER ACRE, SEE INSIDE BACK COVER

SUDAN GRASS

A New Forage and Hay Crop—A Valuable One-Season Crop

This grass was introduced in the States by the Department of Agriculture and has proved a great success, especially for dry-land conditions, and it appears to do equally well in all parts of the Willamette Valley.

Sudan Grass is strictly an annual and dies each year. This makes it fit admirably into any system of rotation. It is a tall, quick-growing grass, reaching a height of from 5 to 7 feet. The plant stools wonderfully and yields well.

It belongs to the sorghum family, but is more slender and grassy in manner of growth, earlier and hardier, and matures in 10 to 12 weeks. Yields a good crop of first-class hay. All stock relish it green or cured and thrive on it. Yields of from two to four tons per acre are common, and under irrigation they run as high as eight to ten tons per acre.

SEEDING.—Plant late in the spring or during the summer as a catch crop. Yields best sown in drills 18 inches apart and given one cultivation. 10 lbs. per acre. If sown broadcast and harrowed in, 25 lbs. per acre. If cut early will often make 2 or 3 crops.

HIGHEST QUALITY SEED: 10 lbs. \$2.00; per lb. 30c, postpaid; 50 to 100 lbs. at 15c lb.

KENTUCKY BLUE (*Poa Pratensis*)

One of the best grasses for permanent pasture, furnishing a constant supply of the most nutritious feed during the greater part of the year.

NOTE.—Very short crop of Blue Grass this year; prices no doubt will advance.

Fancy, 10 lbs. \$6.00; per lb. postpaid 65c

FOR LAWNS.—Blue Grass is used very extensively for lawns and is found in all good lawn grass mixtures.

Our H. Q. (highest quality) Extra Fancy seed is unexcelled for weight and purity. Few dealers handle this high grade recleaned seed on account of its cost. This seed, straight or mixed with Fancy White Clover, is excellent for lawns.

H. Q. Extra Fancy, 10 lbs. \$6.50; per lb. postpaid 75c.

ORCHARD (*Dactylis Glomerata*)

Of the greatest value in permanent pasture mixtures; thrives best in moist, shady places, but will withstand drought exceedingly well. Will do well under trees, or shady places. Valued for hay crop, as it is very nutritious if cut early.

10 lbs. \$3.00; 50 to 100 lbs. at 28c; per lb. postpaid 40c.

ENGLISH RYE GRASS (*Lolium Perenne*)

A strong-growing, hardy perennial grass, noted for its nutritive qualities. It is equally valuable for both grazing and hay. It grows very rapidly and makes a good showing quicker than most grasses.

10 lbs. \$1.50; 50 to 100 lbs. at 12c lb.; per lb. postpaid 25c.

FOR LAWNS this is used and recommended by many gardeners. Unless sown thickly (1 lb. to 15 feet square), it grows too coarse. For large grounds and parks it is very successful. Often mixed with White Clover. For lawns we offer a high-grade double cleaned perennial seed.

10 lbs. \$1.75; 50 to 100 lbs. at 15c; per lb. postpaid 30c.

RED TOP (*Agrostis Vulgaris*)

Of great value for mixing with hay or permanent pasture grasses; will succeed in nearly any soil, but thrives best in a rich, moist soil; makes a fine bottom growth, rendering it invaluable to be sown with timothy, orchard or alsike clover.

Fancy Hulled Solid Seed, 10 lbs. \$3.00; 50 to 100 lbs. at 28c; per lb. postpaid 35c.

Fancy, for lawn seeding, 10 lbs. \$3.50; 50 to 100 lbs. 35c; per lb. postpaid 45c.

NOTE.—We know you can buy cheaper Grass Seeds from other dealers. We offer only the **BEST RECLEANED HEAVY CLEAN SEEDS**—by far the cheapest to buy.

GRASS SEEDS—Continued

For amounts of seed to sow per acre, see inside back cover

Prices subject to change. Write for latest price list

TIMOTHY (Phelum Pratense)

As a hay crop, timothy is unsurpassed by any other grass. Thrives on ordinary soil, but succeeds best in a moist loam. Best to cut it when in blossom or soon after flowering. Beneficial to sow timothy with red top and red clover, as they produce more of a bottom growth.

10 lbs. \$1.50; 50 to 100 lbs at 12c; per lb. postpaid 25c.

MEADOW FESCUE (English Blue Grass)

Perennial; grows three to four feet high. Roots deep, thus resisting drought. It succeeds on any ordinary soil; a heavy cropper excellent for hay or pasture.

10 lbs. \$3.50; 50 to 100 lbs at 33c; per lb. postpaid 50c.

BROMUS INERMIS (Brome Grass)

On account of its strong perennial character, and its unusual drought-resisting powers, is the best grass we have for the semi-arid regions of the Northwest. It grows luxuriantly, is freely eaten in either the dry or green state by cattle, and yields enormously, making the best of hay for horses or cattle.

10 lbs. \$3.50; 50 to 100 lbs. at 33c; per lb. postpaid 45c.

ITALIAN RYE (Lolium Italicum)

A quick-growing grass, attaining a height of 2½ to 4 feet; very desirable for meadows or permanent pastures; thrives best on soils that are slightly moist, and will even stand considerable overflow; grows easily and bears an abundance of foliage that makes the best and sweetest hay imaginable.

Imported Seed, 10 lbs. \$1.50; 50 to 100 lbs. at 12c; per lb. postpaid 25c.

MESQUITE (Holcus Lanatus)

It is usually sown on virgin soil, without cultivation, after the ground has been burned over.

Fancy Hulled Seed, 10 lbs. at \$2.25; 50 to 100 lbs. at 19c; per lb. postpaid 30c.

RHODE ISLAND BENT (Agrostis Canina)

Forms a very fine turf even on light soils; desirable for lawns, as it forms a very close sward. Very short crop; write.

CRESTED DOG'S TAIL (Cynosurus Cristatus)

A perennial grass, forming a smooth and lasting turf, excellent in mixtures for lawns, putting-green, and pastures. It thrives best on rich, moist land, but can accommodate itself to almost any soil, and, as the roots penetrate deeply into the ground, it can stand severe drought.

10 lbs. \$6.00; per lb. postpaid 75c.

FIELD AND FARM SEEDS

Single pound prices are prepaid. Ten, fifty and one hundred pound prices are NOT prepaid and subject to market changes. See notes about shipping, page 42.

White Jerusalem Artichokes

Planted and cultivated for the tuber, the same as potatoes. Of great value for feeding stock. They are the best and cheapest hog feed known. They are remarkable for great productiveness, over 25 tons have been raised on 1 acre. Easier to grow than potatoes. They need not be dug. If hogs are turned in on them they can easily root the tubers out. One acre will keep from twenty to thirty hogs in fine condition for several months. Said to be a preventive of cholera and other hog diseases. Excellent for fattening if fed with a grain or mash ration. Plant 400 lbs. per acre early in the spring.

By freight or express, 10 lbs. 50c; 50 lbs. \$1.50; 100 lbs. \$2.50. Per lb., prepaid, 20c; 4 lbs. 60c. Write for quantity price.

BUCKWHEAT

SILVER HULL.—A very good and popular variety; grain is of a light gray color; has a thin husk; matures early, and yields heavily; a good milling variety.

10 lbs. \$1.25; 100 lbs. write; per lb. postpaid 25c.

JAPANESE.—Good yielder, ripens early; excellent for bees to work on as it remains in bloom longer.

10 lbs. \$1.25; 100 lbs. write; per lb. postpaid 25c.



Artichoke Tubers

CHEAT SEED

Cheat seed yields a good crop of hay, especially on low or moist soil, and will stand considerable overflow without harm. Sow in the fall or early spring, the same as oats and about 100 pounds per acre.

10 lbs. 60c; 100 lbs. \$3.50; per lb. postpaid 20c.

Want a Farm Dog?

Every farmer needs a good dog. We sell dogs and puppies of all kinds, utility and pedigreed. Collies, Shepherds, Hunters, etc. Write. See page 157.

Farm and Field Seeds—Continued

Prices subject to market changes. See notes, top page 42

BARLEY

H. Q. True Beardless

This new clean strain, grown under contract for us, we believe is the **ONLY TRUE BEARDLESS** barley in the state. Agricultural agents and farmers who inspected our field pronounced it the only true, clean beardless barley they had found anywhere.

A wonderful yielder, even on dry, sandy soil. Stands up well and not likely to lodge. Makes excellent hay for horses or stock. Get a start of real beardless.

10 lbs. 75c; 50 lbs. \$2.00; 100 lbs. \$3.50. By mail, postpaid, 1 lb. 30c; 5 lbs. \$1.00.

COMMON BEARDLESS

Market price. Write.

Hannchen Barley.—Earliest and best of the 2-rowed barleys. A sure and heavy cropper. Grain plump, thin hull and beards drop or break off readily. For spring planting but will do well seeded in fall where winters are mild.

Prices: 10 lbs. 65c; 100 lbs., write; per lb. 20c; 3 for 50c; postpaid.

ODERBRUCKER.—Six-rowed, bearded, very popular, early and prolific.

Prices: 10 lbs. 75c; 100 lbs. write; per lb. postpaid 20c; 3 for 50c postpaid.

WISCONSIN PEDIGREE BARLEY.—Six-rowed, bearded, excellent variety. Write for prices.

WHITE HULLESS or BALD BARLEY.—An excellent beardless barley for stock feeding. Grain plump, heavy, and when threshed is hulless like wheat; a heavy cropper. When grown and cut for hay it produces a crop which is very rich and almost equal to a grain feed.

10 lbs. 85c; 100 lbs. write; per lb. postpaid 25c.



H. Q. True Beardless (1/2 reduction)

COW PEAS

Are really small beans of vigorous vining habit and heavy foliage of great nutritious value. Make excellent green feed cut and fed or pastured.

10 lbs. \$1.50; 100 lbs., write; 1 lb. 25c; 3 lbs. 50c, postpaid.

FIELD PEAS

Field Peas are a very profitable crop and are grown here very extensively. They can be grown alone or with oats. When planted with oats and cut green they make a large amount of very rich feed; also very valuable for enriching the soil if plowed under. The dry peas make excellent hog feed and are quite fattening. Sow, if alone, 2 bushels to an acre; if with oats, 80 lbs. peas and 2 bushels oats.

WHITE CANADIAN.—The leading and most popular kind; seed creamy white; a heavy cropper. Yields 30 to 50 bushels per acre.

10 lbs. \$1.00; 100 lbs., write; per lb. postpaid 20c.

SWISS.—A flat or 3-cornered variety of excellent quality for soup. Insects do not trouble this variety.

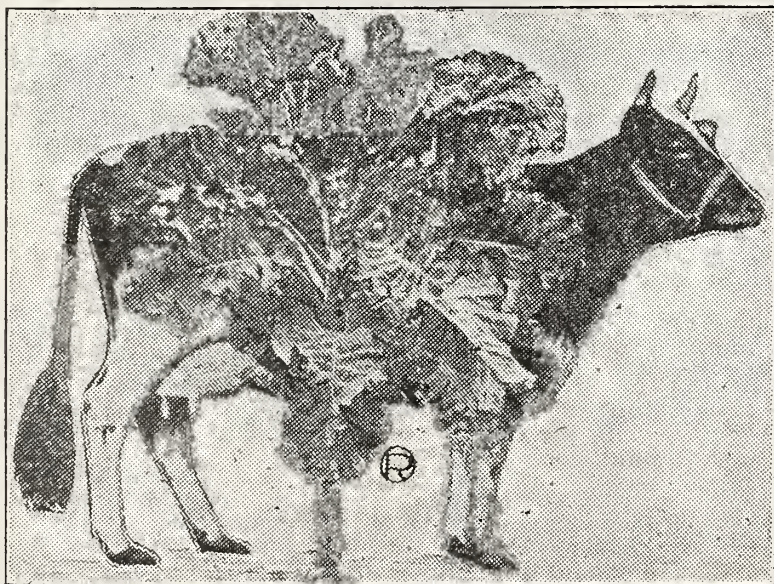
10 lbs. \$1.50; per lb. postpaid 30c.

BLUE PRUSSIAN.—Valuable variety, seed green. Used extensively as a dry soup pea. 10 lbs. \$1.50; per lb. postpaid 25c.

Thousand-Headed Kalt

JERSEY KALE—COW KALE.

Recommended by agricultural colleges, granges and dairymen as one of the most valuable green forage plants for the Pacific Coast.



Thousand-Headed Kale

It grows rapidly and produces a mass of large, thick, curly green leaves, rich and succulent, which are eagerly eaten by stock and poultry. If planted early will produce valuable green feed during the dry summer months. Makes the most rapid growth if sown in the early spring, but locally it is extensively planted in summer and fall for winter feed. Will stand light freezing. Stalks can be cut off, or the larger lower leaves broken off, leaving the tops to grow. Under good cultivation plants will grow from 5 to 6 feet high. Sow 2 to 3 lbs. per acre, thinly in drills 2 to 4 feet apart and thin out. For late planting (July and August) it is better to have strong plants from earlier seeding and set out same as cabbage, 2 feet apart, in rows. Thin out later if plants attain extra large size.

This cut is from photo, and gives you a good idea of the size and plant when well grown. Pkt. 5c; oz. 15c; 4 oz. 25c; lb. 75c postpaid.

Field Corn for Oregon

If you want to raise some good Field Corn, plant our Western grown Seed Corn. The strains we are offering you are acclimated and especially adapted to our short, cool summers. Eastern and Southern grown field corn seed is all right for green fodder, but of little value on this Coast, if you want the best corn for silo, or wish to raise matured, dry ears, for winter grain.

Read This

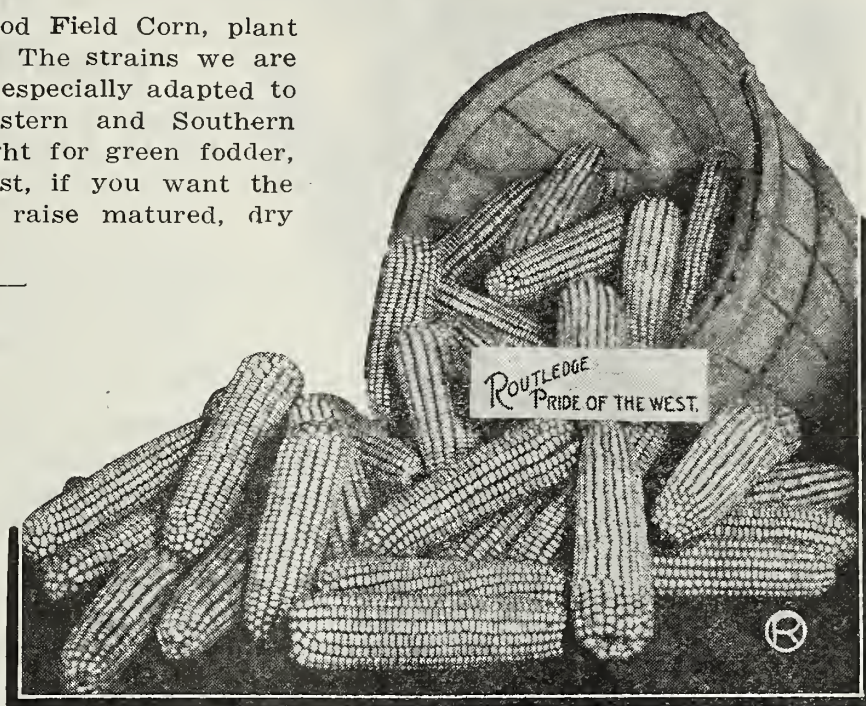
Arlington, Wash.,
May 11, 1921.

Routledge Seed & Floral Co.

Gentlemen: I planted your *Pride of the West* Field Corn last year and had the finest corn around here. There were two or three ears on each stalk.

Yours truly,

R. VAN DYKE.



Routledge Pride of the West

Won First Prize at Multnomah County Fair, 1921.

Oregon grown; acclimated. A grand success in Oregon. We have been raising this variety for years, and by selecting the earliest ripening and best select ears, now have a strain that is unsurpassed for a large and profitable crop of large, well matured ears or for cutting for silo. Ask H. Dahl or R. B. Hall, our County Agriculturist, both at Gresham, Ore. They know what it is.

See illustration from photograph.

Routledge Pride of the West Field Corn is an early maturing variety, producing stalks from 6 to 8 and often 10 feet high, and large ears, 7 to 9 inches long. Cobs covered with 14 to 16 rows of deep, yellow kernels. It is a heavy yielder. Our strain has been greatly improved in the last few years. Plant some of this corn this season; you will be pleased with results, we are sure.

We claim this is the earliest and heaviest yielding strain of Yellow Dent corn grown in Oregon. Try it and be convinced.

Large pkt. 10c; lb. 25c, postpaid. Not postpaid, 10 lbs. \$1.50; 100 lbs., write.

Longfellow Extra Early

This valuable corn is a flint variety. The seed is a deep rich golden yellow, glossy and hard. We believe this is hardier, earlier and will grow under more adverse conditions than most any other kind. The ears are 8 rowed, from 10 to 15 inches long and 1½ to 1¾ inches in diameter. The cob is very small, kernels large, broad, glossy, deep yellow and very rich in food value. Stalks 5 to 7 feet high. Fifty lbs. of corn on the ears will shell about 40 lbs. of corn, leaving only 10 lbs. of cob, showing that the grain yield is equal, if not greater than the large eared kinds Northern grown seed.

Per large pkt. 10c; lb. 25c, postpaid. Not prepaid, 5 lbs. 75c; 10 lbs. \$1.25; 100 lbs., write for prices.

Gervais, Ore.
Routledge Seed & Floral Co.

Gentlemen: I have had wonderful success with your seeds as every seed put in the ground grew—so me for Routledge "H. Q." Seeds.

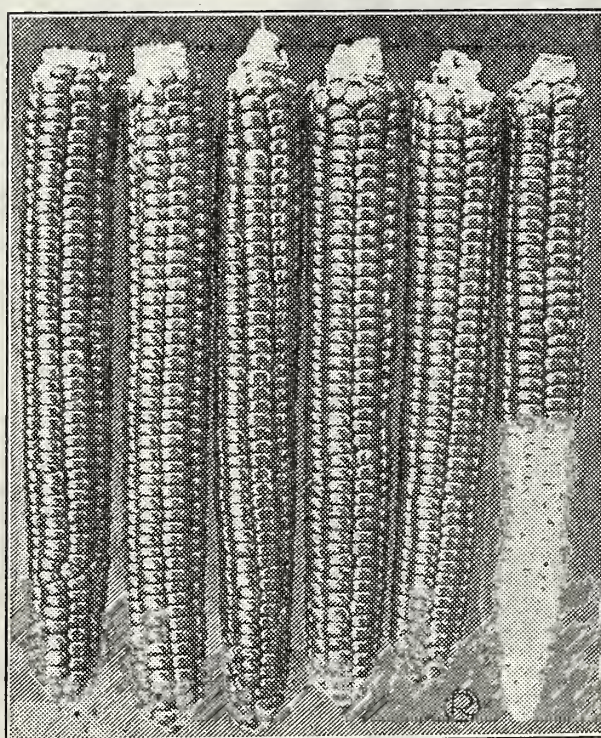
Yours truly,

R. G. McKAY.

Minnesota No. 13

Well and favorably known in many sections of the West. Produces splendid large ears with deep kernels of bright yellow. A strong and vigorous grower with heavy foliage. Very popular variety for ensilage.

Northern Grown.—Large pkt. 10c; lb. 25c, postpaid. Not prepaid, 10 lbs. \$1.25; 100 lbs., write for prices.



Longfellow Extra Early Flint

OUR OREGON GROWN ACCLIMATED FIELD CORN WILL PLEASE YOU

SEED OATS

Certified "Shadeland"

BUY THE GENUINE SHADELAND CERTIFIED SEED OATS.—Many dealers and some seed stores are trading on the reputation of the famous "Shadeland" oats, claiming their stock is just as good, etc., and cheaper. If so, why didn't they win the "first prizes" at our State and County Fairs last fall? Why didn't their stock pass "inspection" by the O. A. C. specialist?

REMEMBER, we have the originator's Shadeland-grown certified seed. **ORDER FROM US AND BE SURE.** "Shadeland" is a "registered" word and cannot lawfully be used on any stock but that grown by the owner.

"CLIMAX," "ECLIPSE" or "SENATOR" without the registered prefix "SHADELAND" is not the originator's home-grown true stock.

PRIZE OATS.—For 20 years Shadeland Oats have never failed to win first prizes at Oregon State and our County Fairs and Land Products shows. **Increase your crop 25 to 50 per cent by planting pedigreed prize oats.** See cut from photograph, seed heads only (about one-third size).

Certified Shadeland Climax (No. 1)

This grand oat belongs to the tree or branching class, and is a vigorous, healthy grower of strong stooling qualities. This is one of the **heaviest yielding oats introduced to date.** It does not produce much straw, but the yield of "thin hulled" plump heavy grain is amazing. For early spring planting, large yield and quick maturity, Climax is a winner.

Prices: Per bu. \$1.50; 100 lbs. \$4.00. By mail, postpaid, 4 lbs. 50c.

Certified Shadeland Eclipse (No. 3)

"Eclipse" is the best side oat grown. Eclipse is enormously productive, early, very vigorous, and produces massive heads filled with large, plump grains of finest milling quality. Awarded three "First Special Prizes" for the best milling oat. Can be planted in the fall as it is hardy as the grey oat.

Prices: Per bu. \$1.50; 100 lbs. \$4.00. By mail postpaid, 4 lbs. 50c.

Certified Shadeland Senator (No. 2)

A valuable new oat, extremely early and a great producer. Matures quickly, therefore can be planted quite late. Especially adapted for rich, moist, late ground or overflow bottom lands. **Senator** has stiff straw, stands up well and produces handsome, large, full heads of extra large, plump grain. (See cut of single head.)

Prices: Per bu. \$1.75; 100 lbs. \$4.25. By mail postpaid, 4 lbs. 50c.

Shadeland Hulless

Shadeland Hulless is the heaviest yielding of all hulless. This Oat grows and is harvested like any other oat, but it comes from the cleaner minus the hulls and is ready to grind, roll or chop, or can be cooked whole—the quality is unsurpassed. 50 lbs. per acre.

Prices: 10 lbs. \$1.25; 100 lbs. \$8.00. By mail postpaid, 1 lb. 25c; 3 lbs. 65c.

White Seed Oats—Grey Winter Oats

Aside from the Shadeland Seed Stock we can supply other choice seed oats at about market price—order what you want at \$3.00 per 100 lbs. and you will get "full value," or write first, for quotations, stating amount wanted.



Single Heads
No. 1—Climax
No. 2—Senator
No. 3—Eclipse

OATS AND PRIZES.—We have on display at our store Shadeland Oats in the straw and the Blue Ribbon Prizes for your inspection—write for quantity prices.

Kaffir Corn

An excellent fodder plant. Seed small and almost round, valuable poultry and pigeon food. It does best sown thinly in drills three feet apart. 10 lbs. \$1.00; per lb. postpaid 25c

Lentils

Succeed best in dry, sandy soil. A leguminous annual, the seeds of which are valuable for pigeons and are used largely for soups. The leafy stalks make good forage.

Per lb. postpaid 40c; 3 lbs. \$1.00

Millet

Sow in April, May or June, 20 pounds for seed or 35 pounds for hay per acre. Must be sown early to mature in Willamette Valley.

EARLY FORTUNE.—This variety seems to do extra well here; try it. Heads large and loose, and seed is amber red and three times as large as the Common Golden. Makes good poultry feed. 10 lbs. \$1.00; 100 lbs., write; per lb. postpaid 20c

LIBERTY (formerly called German).—An improved variety yielding a larger crop of seed than the Common Millet; it is also taller than the Common Golden, and yields a heavier crop of hay. 10 lbs. \$1.00; 100 lbs., write; per lb. postpaid 20c

HUNGARIAN.—A dwarf millet; superior for hay.

10 lbs. \$1.25; 100 lbs., write; per lb. postpaid 25c



Millet

Profitable Potatoes for Seed—See Pages 28-29

Rape, Dwarf Essex

We offer you true, pure seed. One of the best forage plants, on account of the large amount of green feed it will produce at a season of the year when everything else is dried up. It has yielded ten tons of green forage per acre, and has twice the feeding value of green clover. Sheep, swine, cattle and poultry eat it readily. Rape will do well on almost any soil. Prepare the ground as for turnips, and sow any time from May till September; or plant it with grain. Sow, per acre, three pounds, in drills; or if broadcast, five pounds.

10 lbs. \$1.35; 100 lbs., write; per lb., postpaid, 30c

Seed Rye

When ready to buy Fall or Spring Rye Seed, write us for quotations on quantity wanted or send in your order and we will give full value.

10 lbs. 75c; 100 lbs., write; postpaid, 20c; 3 lbs. 50c

Speltz—Emmer

Sow in the spring, the same as wheat, at the rate of two bushels per acre. Cut when the grain is past the middle stage of milk, when it will make splendid grain and lots of rich straw hay. Thresh like wheat, only not so closely. Can be fed whole, rolled like barley, or ground.

10 lbs. \$1.00; 100 lbs., write; lb., postpaid, 20c; 3 lbs. 50c

Sugar Cane or Sorghum

A valuable crop to grow for fodder or ensilage, as it furnishes an immense tonnage to the acre.

10 lbs. \$1.50; 100 lbs., write; per lb., postpaid, 30c

Vetches

OREGON VETCH (*Vicia Sativa*).—Oregon's greatest forage plant. Often called Fall Vetch. Grown very extensively in Western Oregon and Washington, especially in the Willamette Valley and on the Oregon Coast. It furnishes an abundance of excellent feed, either green or dried. The seed is generally mixed with wheat, oats or rye having a stiff straw to hold it up. Sown alone 85 pounds or 60 pounds with a bushel of grain per acre. Sow in the fall or early spring.

Prices: 10 lbs. 75c; 100 lbs. \$5.00; per lb. 20c; 3 lbs. 50c, postpaid.

HAIRY SAND OR WINTER (*Vicia Villosa*).—This variety thrives on poor arid, sandy soils. It is sown in the fall or spring, mixed with rye, which serves to support the plants. Sow 20 pounds per acre.

10 lbs. \$1.75; per lb., postpaid, 40c; 100 lbs., write



Vetches

THE WISE ONES

Will use Mulford's Vetch Culture to inoculate their seed before sowing. There is no question about its **VALUE**. See Page 41. Eight-page Leaflet on request.

Single pound prices are prepaid, but ten, fifty and one hundred pound prices are NOT prepaid and subject to market changes. See notes, page 43. For amount of seed to sow per acre see table inside back cover.

SEED WHEAT

Prices subject to market changes. Will send full value of money sent. Quote prices on request for prompt acceptance.

EARLY BAART.—An excellent spring variety, fully as early as Marquis, much earlier than Bluestem. A wonderful yielder. Finest milling quality. We recommend this to you.

Per lb. 20c; 3 for 50c, postpaid; low 100-lb. prices on request.

MARQUIST.—A commercial variety of spring wheat. Excellent milling quality, matures early and yields heavily.

Per lb. 20c; 3 lbs. 50c, postpaid; low 100-lb. prices on request.

BLUESTEM.—A popular and profitable spring variety, often sown in fall where winters are mild. A strong grower and yields well.

Per lb. 20c; 3 lbs. 50c. Low 100-lb. prices on request.

FORTYFOLD.—A well known winter variety, excellent milling quality. Matures early, and yields well.

Per lb. 20c; 3 lbs. 50c, postpaid; 100 lbs., write.

ALFALFA AND CLOVER SEEDS

Single pound prices on Grass Seed are prepaid. Ten, fifty and one hundred pound prices are NOT prepaid and subject to change. See notes, page 42. For amount of seed to sow per acre, see table inside back cover.

ALFALFA, OR LUCERNE CLOVER

Reports prove that Alfalfa will grow in all parts of the West, but requires a deep, loose soil. Will not thrive on heavy clay or where there is hard pan. As soon as cut it immediately commences to grow. Excellent hay or pasture. Alfalfa, once established, is a crop so profitable that every farmer may well take great care to get a stand. Much has been published about its high feeding, fertilizing and wonderful yield possibilities.

Price: 10 lbs. \$2.60; 50 to 100 lbs. at 23c; per lb. postpaid 35c.

DRY LAND ALFALFA

For high, dry, hot land, where irrigation is impossible.

Price: 10 lbs. \$2.75; 50 to 100 lbs. at 24c; per lb. postpaid 35c.

GRIMM ALFALFA

This new variety is very hardy and will stand much more tramping and root injury. In many Western sections it is out-yielding the common variety and proving much more profitable. It is a little earlier and will do well on most all soils except undrained meadows. Not affected by extreme heat or cold and does better in a wet climate than any other alfalfa. We offer the genuine true Grimm seed.

Prices: 75c per lb. postpaid; 10 to 20 lbs. at 65c lb.; 100-lb. prices on request.

WHITE CLOVER (*Trifolium Ripens*)

Used largely in lawns and permanent pasture mixtures. Accommodates itself to a great variety of soils. High grade clean seed is very scarce and high this year; beware of low-priced seed this season.

Choice Seed, 10 lbs. \$5.80; per lb. postpaid 70c.

For Lawns always buy our Extra Fancy Seed, which is the purest high quality seed obtainable, and the true very dwarf, hardy variety.

Extra Fancy Seed.—Per lb. postpaid 75c.

RED CLOVER (*Trifolium Pratense*)

Hardy, and succeeds well on any good soil. The most popular variety.

10 lbs. \$2.35; 50 to 100 lbs. at 22c; per lb. postpaid 35c.

ALSIKE CLOVER (*Trifolium Hybridum*)

Valued highly for sowing with other grasses. Excellent for hay and pasture; valuable for bees; resists both drought and excessive moisture.

10 lbs. \$2.50; 50 to 100 lbs. at 22c; per lb. postpaid 35c.

SWEET CLOVER (*Melilotus Alba*)

Sweet Clover has come to stay. There is no doubt about it. Ask any farm paper, any state college, the U. S. Department, or better yet, any farmer who has grown it.

Sweet clover is used as either a feed crop or as a fertilizer to plow under to improve the soil and increase the crop to follow. It grows fast and is easy to start.

Grows luxuriantly on good soils but it will also grow and thrive on thin, sandy soil, hardpan, gumbo, rocky upland, clay and alkali land.

Sweet Clover lives two years. It makes large, rapid growth the first season and can be cut for hay or pastured the last half of the summer, but does not bloom or bear seed. The second year it blooms, bears seeds and dies. Will make two crops of hay or a crop of hay and one of seed the second year. Can be plowed under either the first or second year, but to get the full value in humus the second season is better on account of the large roots that penetrates the lower layers of soil, thereby loosening it up and adding much humus and more nitrogen.

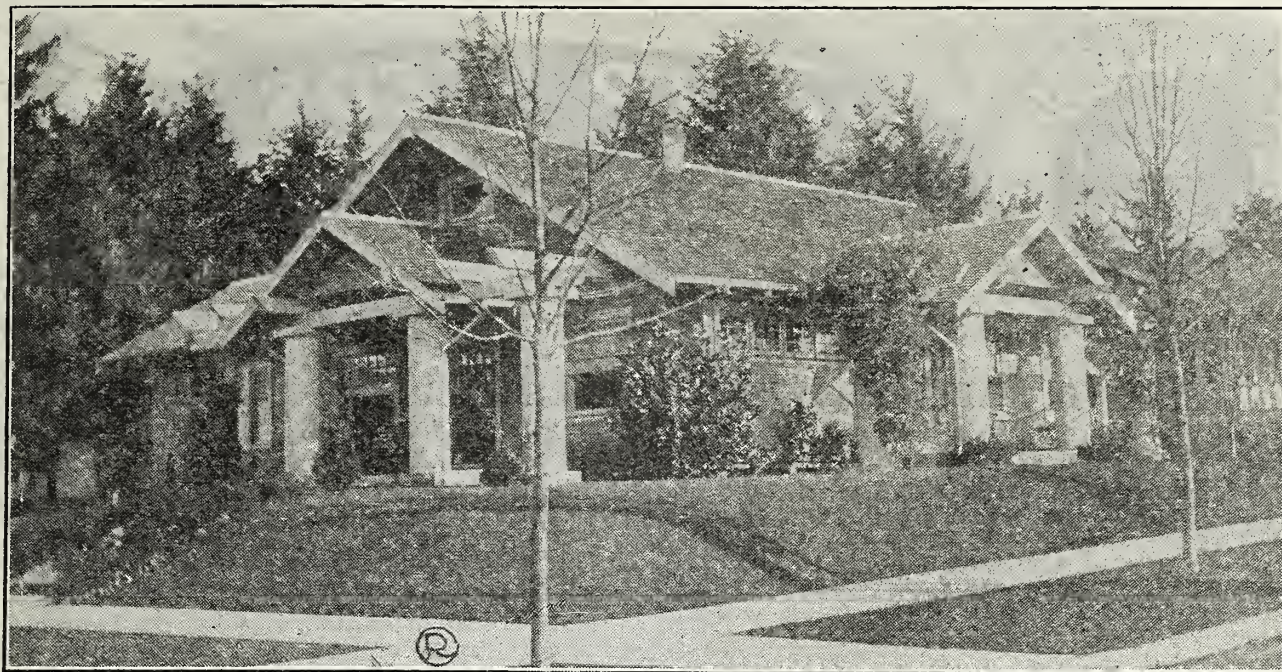
Sown very early in the spring. It does well sown either alone or with a nurse crop of small grain. Use 15 to 20 pounds of seed per acre.

Sweet Clover makes excellent pasture for horses, cattle, sheep, hogs or chickens. A very early and continuous cropper.

Price: Per lb. 35c postpaid; 10 lbs. \$2.50; trial pkg. 10c. Write for quantity price.

INOCULATE THIS
SEED WITH
MULFORD CULTURE

The MULFORD CULTURES contain nitrogen-fixing bacteria, which form nodules on the roots of field and garden legumes that act by collecting nitrogen from the air and converting it into nitrates—food for soil and plants. Get wise by reading page 41.



One of our Portland Bungalows with a beautiful lawn, shrubs and vines

Nothing adds a greater air of refinement to a home than a beautiful, well-kept lawn. The time, labor and money spent is a good investment, to say nothing of the pleasure it gives the owner, as well as those who pass by. The planting of a few shrubs, vines and roses should not be forgotten. The pretty home above is "well done," attractive and inviting, and the owner has just cause to be proud of it.

LAWN GRASS SEED

Though we offer, separately, seed of many of the grasses suitable for the lawn, we consider as very erroneous the somewhat prevalent idea that any single variety of grass seed is preferable or equal to a mixture.

R. R.'s EVERGREEN LAWN GRASS

To obtain a good Lawn Grass Mixture, it is necessary that the best possible seed of fine grasses be used in the combination, embracing such varieties as are of neat, close growth, extreme hardiness, and adapted to produce a quick, permanent sod. Judicious selection of seed, knowledge of the habits, vigor, quality and hardiness of varieties used in the mixture can only be gained by thorough and practical tests under different climatic and soil conditions. After many years' experience, we offer our pure, clean Evergreen Lawn Grass Seed Mixture, composed of a thoroughly balanced combination of various native and foreign fine-leaved, deep-rooting grasses of interweaving habit, that will flourish under varied soil and climatic conditions, and which may be depended upon to produce a beautiful, compact, evergreen sod that will resist tramping and hard usage, and at the same time present that handsome, velvety appearance so much desired.

PRICE, 65c per lb., postpaid; 10 lbs. or more, NOT PREPAID, at 60c per lb.

Note.—You better spend a few cents or a dollar extra on the seed you buy and have a fine lawn that you'll be proud of. Sow 1 pound seed to 15 feet square for best results.

WHITE CLOVER.—Many gardeners like white clover mixed in lawn seeds and it is excellent, especially if your soil is heavy or poor. White clover grows quickly and acts as a nurse crop and protects the fine leaved grasses. Evergreen Lawn Grass with one-fourth white clover is 65c per pound, postpaid.

Seeds for Lawns and Special Mixtures

SEED.—There is as much difference between clean, high-grade grass and clover seeds for lawn making and the common or ordinary grass seeds as there is between high-grade white flour and bran. You would not think of trying to make light, white bread of bran, neither should you expect to make a fine, green, velvety lawn from low grade, light weight, immature and foul grass seeds. Weight, purity and germination is what sets the price of grass and clover seeds. We buy and use the highest grade, pure tested seeds for our Evergreen Lawn Grass Mixture. Of course, they cost more, but we know from experience that they give best results and are the only kind of seeds that it pays to use if you want a beautiful lawn. Do not buy low priced Lawn Grass Mixtures and expect good results. NO ONE gives you anything better than you pay for.

SPECIAL MIXTURES.—For all round general conditions, our Evergreen Mixture is unexcelled, but we will prepare special mixtures for shady places, low, wet soils, very dry soils and terraces. Just mention it when ordering.

FEED THE LAWN

Do not starve the grass if you want it to look green and velvety; use "Wonder" and "C-M," as per directions.



Our flower seeds are grown by specialists and are unsurpassed. The following list contains a general assortment of the choicest and most popular and easiest grown flowers for conservatory, greenhouse or garden culture.

HOW TO RAISE FLOWERS SUCCESSFULLY FROM SEEDS

The above is the title of a two-page leaflet we have issued for our customers. It tells **HOW**, **WHEN** and **WHERE** to plant. It is free to all. You will find it of great value.

IF YOU WILL MEMORIZE the following definition of the flower classes **THEY WILL HELP YOU WONDERFULLY** in the selection of seeds and your garden work in general.

ANNUALS

These grow from seed, flower, mature their seed, and die in one year, or in other words, the same season.

Half-Hardy Annuals are those which should be started early in the house, conservatory or hotbed, and transplanted to the garden in settled warm weather.

Hardy Annuals are those which can be sown in the open ground in early spring or started inside and transplanted if very early flowers are desired.

BIENNIALS

These grow from seed, sown from June to August, flower, ripen their seed and die the next year, though some varieties bloom the same season if sown early in gentle heat.

Hardy Biennials will winter in the open ground without protection.

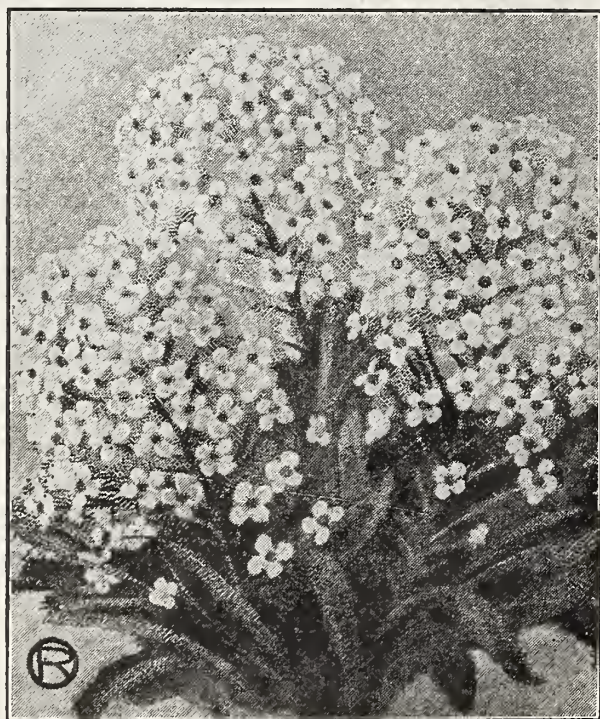
Half-Hardy Biennials require the protection of a cold-frame or cool-house during the winter.

PERENNIALS

These grow from seed, and continue flowering annually for many years after the first season. Some varieties flower the first season if started very early. Sow in the fall for flowers next year.

Hardy Perennials can remain in the open ground during winter without protection.

Half-Hardy Perennials require the protection of a cold-frame or cool-housing during winter.



Sweet Alyssum

AGROSTEMMA

(Rose of Heaven)

COELI-ROSA.—Superb free-flowering, hardy annual, rose-colored flowers; fine for cutting; height 1½ feet; July to September.

Pkt. 10c; ¼-oz. 20c

ALOYSIA

(Lemon Verbena)

CITRIODORA.—A greenhouse shrub, valuable for the fragrance of the foliage; 2 feet.

Pkt. 15c

AGERATUM

Half-hardy annuals, especially well adapted to edge large beds of geraniums, salvia coleus or cannas, flower continuous through the summer. 15 inches.

DWARF LITTLE BLUE STAR.—New; one of the handsomest blue-flowered dwarf edging plants; grows 5 inches high, and is just covered with small, bright blue flowers.

Pkt. 15c; ⅛-oz. \$1.00

AGERATUM MEXICANUM.—

Dwarf, blue.

Pkt. 10c; ¼-oz. 35c

Album.—Pure white, dwarf.

Pkt. 10c; ¼-oz. 35c

Finest Mixed.—All colors.

Pkt. 10c; ¼-oz. 25c

ACROCLINIUM

Hardy annual, with everlasting flowers; good for cutting; flowers double and dry nicely if cut in bud; 1 foot; July to October.

Album.—Double, white. Pkt. 10c; ⅛-oz. 25c

Mixed.—Double, all colors. Pkt. 10c; ⅛-oz. 25c

ALYSSUM

One of the most popular hardy annuals, used especially for edging and also valuable for cutting on account of the fragrance of flowers.

SWEET.—Pure white; 6 inches; June to November. Pkt. 5c; oz. 50c

LITTLE GEM.—The dwarfest and best for design bedding; plants very compact and bushy, and grow only 3 inches high.

Pkt. 10c; ¼-oz. 35c

LILAC QUEEN.—Dwarf, compact, lilac flowers. Pkt. 10c; ¼-oz. 35c

SAXATILE COMPACTUM (GOLD DUST).—Hardy perennial; yellow flowers; April to June; height 9 to 12 inches.

Pkt. 10c; ⅛-oz. 30c

Have you a beautiful lawn? If not, see pg. 49 for Seed, pgs. 38 and 39 for Fertilizer.



Improved Giant Crego Aster

Superb Late Branching

The most popular late-flowering aster. Flowers are very full, large in size, 3 to 4 inches across and borne on long stiff stems 2 to 2½ feet high. A very desirable, beautiful and satisfactory variety. (See cut.)

Deep Rose, Dark Blue, Light Blue, Shell Pink, White or Finest Mixed.

Pkt. 10c; ¼-oz. 50c

Mikado

Very similar to the Crego's Giant, but more dwarf in growth and comes into bloom fully two weeks earlier. The plants attain a height of about 18 inches, of branching habit, and the flowers, borne on long, strong stems, are of large size.

MIKADO PINK.

Pkt. 10c; ⅛-oz. 30c

MIKADO WHITE.

Pkt. 10c; ⅛-oz. 30c

Giant Comet

Considered by many to be the most beautiful of all the Asters. It is an ideal cutting variety, as each plant bears freely exquisitely formed large flowers on long stiff stems.

Pure White, Pink, Crimson, Lavender or Finest Mixed.

Pkt. 15c; ⅛-oz. 40c

Lavender Gem

One of the best; comet type; very early and a charming shade of lavender; excellent in every way.

Pkt. 15c; ⅛-oz. 40c

New Crimson Giant

A late-branching variety of upright growth with extra large, densely double flowers of rich blood-crimson; makes a brilliant bed or border and is splendid for cutting. The form of the flower is nicely shown in plate above.

Pkt. 15c; ⅛-oz. 40c

Asters, Fine Mixed

A mixture of choice kinds for all season blooms.

Pkt. 10c; ¼-oz. 50c

ASTERS

One of the easiest and most satisfactory summer and fall flowers to grow. We take the utmost pains to select seeds from the most perfect flowers only, and wish to assure our patrons that our strains are the superiority of perfection.

Improved Giant Crego

The most beautiful and desirable aster we have ever seen; very hardy, free-flowering and one of the best for general planting; the plant is a strong, healthy grower, and will produce 12 to 15 long-stemmed flowers of the most graceful and pleasing style (see cut.) With ordinary care you can grow flowers measuring 5 to 6 inches across. Most of the handsome large aster blooms you see in the Portland flower stores are of this kind.

Pure White, Shell Pink, Rose Pink, Purple, Lavender or Mixed.

Pks. 10c; ⅛-oz. 35c

SPECIAL.—One packet each of the five colors only 40c.

For Aster Plants, see page 79.

Queen of the Market

Most valuable for early cutting; the plants branch freely and produce a great many well-formed flowers nearly a month in advance of the later sorts.

White, Pink, Lavender, Crimson or

Finest Mixed.

Pkt. 10c; ⅛-oz. 30c



Superb Late Branching

AMARANTHUS

CAUDATUS (Love-Lies-Bleeding).—Hardy annual; ornamental foliage plant; fine for bedding; green foliage with long, drooping crimson racemes; 2 feet.

Pkt. 10c; ¼-oz. 25c

CRUENTUS (Prince's Feather).—Dark red foliage and feathery flowers; 2 feet.

Pkt. 10c; ¼-oz. 25c

TRICOLOR (Joseph's Coat).—Ornamental; for foliage only; red, yellow and green.

Pkt. 10c; ⅛-oz. 25c

ANTIRRHINUM

(Snapdragon)

Half-hardy perennial and annual; blooms in July if sown early in the house; one of our finest cut flowers; 2 to 3 feet. (See cut.)

Queen Victoria.—New, tall; very large; pure white; superb.

Pkt. 10c

Daphne.—Soft blush pink.

Pkt. 10c

Golden Queen.—Rich, pure yellow.

Pkt. 10c

Defiance.—Brilliant scarlet.

Pkt. 10c

Special—1 Pkt. each color 30c; ⅛-oz. any color 30c.

Tall Giant, Finest Mixed.—Our seed of this is exceptionally fine; height, 3 feet.

Pkt. 10c; ⅛-oz. 25c

Semi-Dwarf, Finest Mixed.—Fine for bedding; 18 inches.

Pkt. 10c; ⅛-oz. 25c

AQUILEGIA

(Columbine)

Hardy perennials; are most elegant plants and invaluable for cutting or as hardy border flowers; beautiful and graceful; June to September. 2 to 3 feet. (See cut.)

LONG SPURRED.—Superb mixture of all the most desirable shades.

Pkt. 15c; ⅛-oz. 50c

Single, Finest Mixed.

Pkt. 10c; ¼-oz. 35c

Double, Finest Mixed.

Pkt. 10c; ¼-oz. 35c

Chrysantha.—Golden yellow.

Pkt. 15c; ⅛-oz. 50c

Coerulea.—Violet blue and white.

Pkt. 15c; ⅛-oz. 40c

Nivea Grandiflora.—A beautiful, large, pure white.

Pkt. 10c; ⅛-oz. 25c

FOR PERENNIAL PLANTS SEE PAGES 82 to 86.



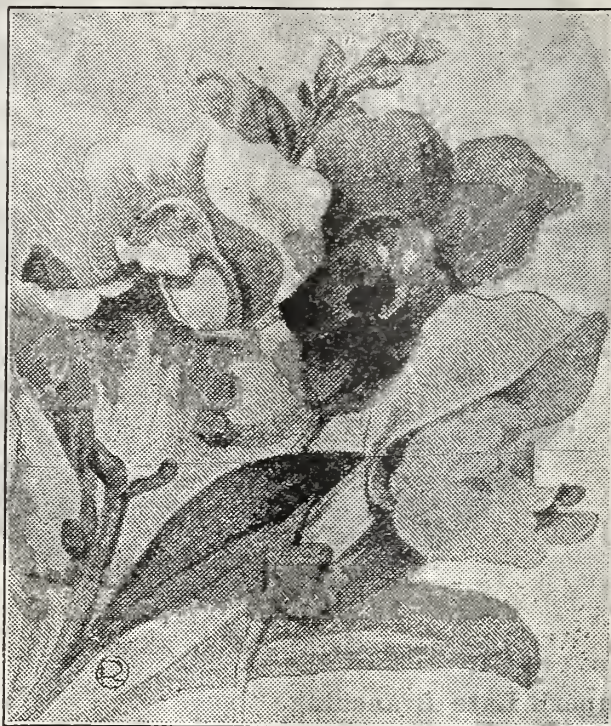
Aquilegia (Columbine)

ARABIS

(Rock Cress)

ALPINA.—Hardy perennial; pure white flowers in close head; excellent for edging rock-work or dry situations; 6 inches; April to June.

Pkt. 10c; ¼-oz. 50c



Antirrhinum

ASPARAGUS

PLUMOSUS NANUS.—A graceful pot plant for either house or conservatory (see illustration under Fern Plants); very finely cut, delicate lace-like foliage.

Pkt. 25c; 100 seeds \$1.00

SPRENGERI.—Drooping foliage; adapted for hanging baskets or cutting.

Pkt. 10c; 100 seeds 50c

BABY BREATH

See Gypsophila, page 59.

BALSAM

(Lady Slipper)

Hardy annual, succeeding best in sunny situation, rich loam and moisture; very showy and of easy culture; 1½ feet; July to September.

PRIZE MIXTURE.—This strain will produce the most perfectly formed double flowers in the greatest variety of colors.

Pkt. 10c; ¼-oz. 50c

IMPROVED CAMELIA-FLOWERED FINEST MIXED.—Large, extra double flowers.

Pkt. 10c; ¼-oz. 40c

BELLIS

(Double English Daisy)

Popular spring and summer flowering perennial; fine for borders; height 4 inches. Easily raised from seed. Blooming season from April to September.

Double Mixed.

Pkt. 10c; ⅛-oz. 75c

Longfellow.—Double pink flowers.

Pkt. 25c

Snowball.—Free flowering; pure white.

Pkt. 15c

Giant Red or Giant White.—Mammoth in size; very rare. Give them rich ground.

Pkt. 25c

BEAN

SCARLET RUNNER.—The well-known, rapid growing annual climber, with bright red flowers, from July to September; height 8 feet.

Large Pkt. 10c; oz. 20c

USE "WONDER."—The best Fertilizer and plant food known. A teaspoonful to a plant does wonders. See page 38.



Balloon Vine

BALLOON VINE

(Love-in-a-Puff)

A rapidly growing annual climber; succeeds best in light soil and warm situation; flowers white; seed vessels look like miniature balloons and of great interest to children; 8 to 10 feet (see cut). Pkt. 10c; 1/2-oz. 35c

BROWALLIA

(Amethyst)

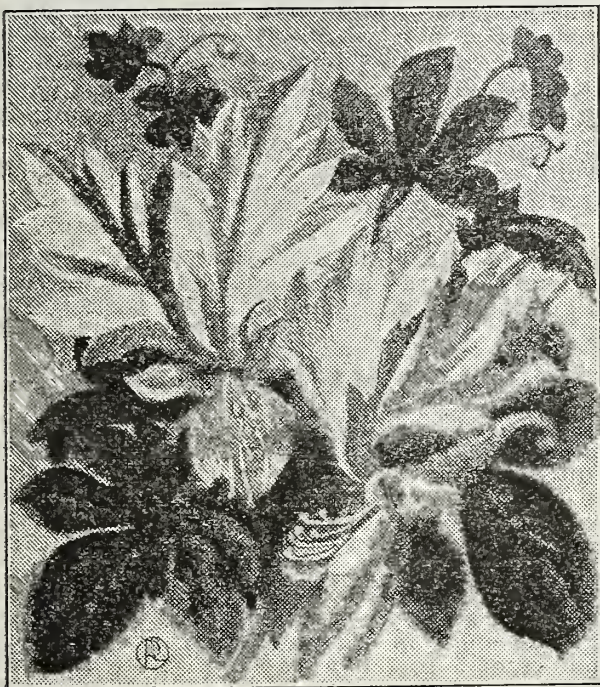
A very profuse blooming, half-hardy annual bedding plant, bearing during summer and autumn handsome winged flowers of different shades of blue; 1 1/2 feet. Pkt. 10c; 1/4-oz. 50c

CALCEOLARIA

Tender annual, a universal favorite for house culture; produces a mass of beautiful puffed, pocket-like flowers of brilliant self-colors and spotted. Our strains of Calceolaria is very fine.

Hybrid Grandiflora.—Mixed.

Pkt. 25c



Canary Bird Vine

A Beautiful Flower Garden

Perhaps you have failed before, but if you will follow our "Cultural Directions" (free on request), you will be successful.

Perennial Flowers are rapidly gaining in favor. They are lasting and flower each year. You gain 1 year by buying our field-grown plants. See pages 82 to 86.

CALLIOPSIS

Showy and beautiful free-flowering annuals, of the easiest culture, doing well in any sunny position, blooming all summer if cut often, excellent massing (see cut). Don't confuse this with the perennial Coreopsis, page 54.

CROWN OF GOLD.—(Coronata Maxima.) A splendid cut flower, large, pure golden yellow. All season. Pkt. 10c; 1/8-oz. 35c

GOLDEN WAVE.—Yellow, with crimson-brown around the eye. Pkt. 10c; 1/8-oz. 25c

CRIMSON KING.—Rich, velvety crimson or garnet. Pkt. 10c; 1/8-oz. 30c

ROUTLEDGE PRIZE MIXTURE.—Showy new shades in all of the choicest varieties.

Pkt. 10c; 1/4-oz. 75c



Calliopsis

CALENDULA

(Scotch Marigold)

Hardy annual; one of the most desirable garden flowers. The flowers are freely produced on long stalks; large, with flat, spreading rays; very showy; flowers the entire season; 1 foot. Excellent for cutting, beds or borders.

Double Finest Mixed. Pkt. 5c; 1/4-oz. 20c

LEMON QUEEN.—A select strain, large double flowers, sunflower yellow.

Pkt. 10c; 1/8-oz. 25c

ORANGE KING.—Grandiflora.—An excellent strain; large, double flowers, rich dark orange. Pkt. 10c; 1/8-oz. 35c

CANNA

A beautiful, large-leaved, showy flowering plant. Seed must be soaked before planting and started in a hot-bed under glass. (For Canna Roots, see page 88.)

CROZY'S HYBRIDS MIXED.

Pkt. 10c; oz. 50c

CANARY BIRD VINE

A rapid-growing summer-climbing annual, 10 to 15 feet high; it will cover trellis work in the most graceful manner, producing hundreds of pretty winged, bright yellow flowers.

Pkt. 10c; 1/4-oz. 35c

CANTERBURY BELLS

(Camapanula Medium)

Very ornamental garden plants of easiest culture; excellent for cutting; hardy biennial; 2½ feet high, producing large, bell-shaped flowers of exquisite colors. Hardy biennials. (See plants, page 82.)

Medium Single White, Blue, Rose or Mixed. Pkt. 10c; ⅛-oz. 45c

Double Mixed, all colors. Pkt. 10c; ⅛-oz. 50c
R. R.'s PRIZE MIXTURE.—A mixture which contains every color and kind of both single and double biennial and perennials.

Pkt. 10c; ⅛-oz. 50c

CALYCANTHEMA.—(Cup and Saucer Canterbury Bells.)—This is unquestionably one of the finest types; they have an extra large calyx, which is of the same color as the flower, giving the appearance of a cup and saucer.

Calycanthema, Pink, Lilac, Rose or White.

Pkt. 15c; 2 for 25c; ⅛-oz. 40c

Mixed Colors. Pkt. 10c; ⅛-oz. 35c

CAMPANULA

(Bellflower)

Well known, beautiful, hardy herbaceous perennials, bearing a great profusion of attractive bellflowers; thrives best in light, rich soil; some of the varieties flower the first season if sown early.

PERSICIFOLIA GRANDIFLORA (Peach Bells).—Undoubtedly one of the finest of the hardy Bellflowers; grows 2 to 3 feet high, with large single flowers.

Blue, White or Mixed. Pkt. 10c; ⅛-oz. 50c

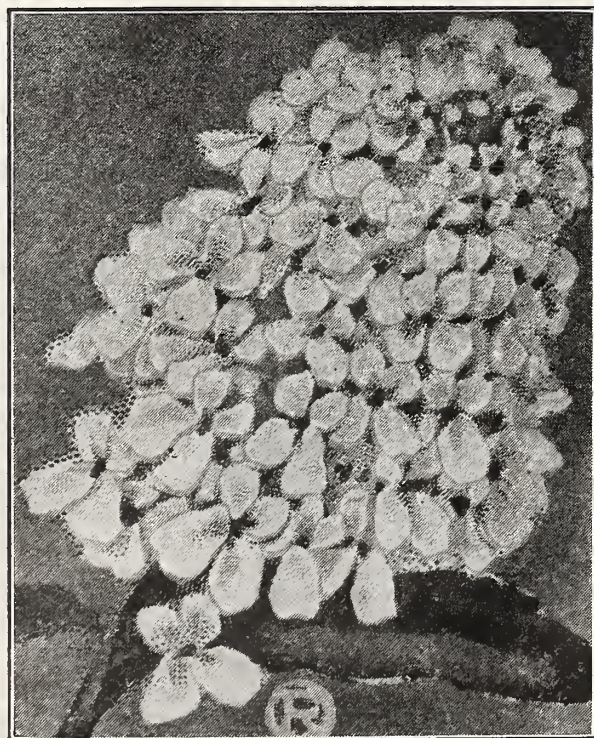
CARPATICA (Carpathian Hare-Bell).—Free-flowering, hardy perennial, continuing in bloom the whole season; color clear blue or white; grows 6 inches high; especially good for edging.

Blue or White. Pkt. 10c; ⅛-oz. 35c

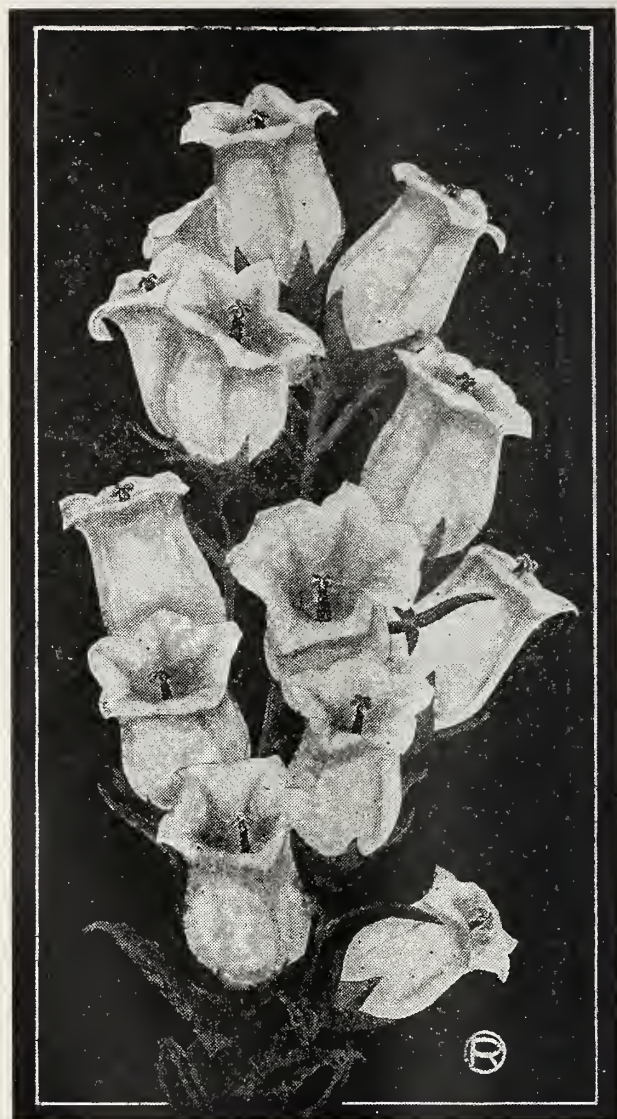
CANDYTUFT — IBERIS

Very popular free-flowering annual, fine for beds or cutting; 1 foot. June to frost if sown early and late.

EMPRESS.—A large-flowered variety of purest white; grown extensively for cut flowers; very desirable. Pkt. 5c; ¼-oz. 35c



Candy Tuft



Single Canterbury Bells

DWARF WHITE LITTLE PRINCE.—Grows but 6 inches high and throws up strong trusses of pure white flowers; excellent for edging or bordering. Pkt. 10c; ¼-oz. 40c

PINK BEAUTY.—Fine, true pink, an exquisite flower. Pkt. 10c; ¼-oz. 35c

CRIMSON OR LILAC.—Very desirable colors; your choice. Pkt. 10c; ¼-oz. 35c

FINEST MIXED.—All colors. Pkt. 5c; ¼-oz. 25c

SEMPERVIRENS.—Perennial; pure white flowers, evergreen foliage; blooms in June; fine for edging, borders and rockeries; 1 foot. Pkt. 15c; 1-16-oz. 35c

CARDINAL CLIMBER

This glorious and absolutely distinct new annual climber is undoubtedly the greatest acquisition to the flower world in years, and the most beautiful and brilliant climber ever grown. It is a strong and rapid grower, attaining a height of 25 feet with beautiful fern-like lacinated foliage and literally covered with a blaze of fiery cardinal red flowers from mid-summer to frost. The flowers are about 1 inch in diameter and are borne in clusters of 5 to 7 blooms each. Like all 'Ipomoeas,' it delights in a warm, sunny situation and good, rich soil. The seed should be soaked in water a few hours before sowing and not planted outside until about May 1.

Pkt. 15c; 2 Pkts. 25c; ⅛-oz. 60c

GREAT FOR FLOWER BEDS.—Read page 39, which tells all about our new product—"C-M"—Kiln-dried Pulverized Cow Manure.

CARNATION

Everyone loves Carnations. For started plants of the finest named varieties, see page 7.

MARGARET CARNATIONS.—The earliest to bloom, and producing large, double, sweet-scented flowers; being half-hardy perennials, if they are slightly protected during the winter they will survive and flower profusely the next spring.

Red, White or Yellow.—Large flowers.
Pkt. 15c; $\frac{1}{8}$ -oz. 75c
Choice Mixed. Pkt. 10c; $\frac{1}{8}$ -oz. 50c

CASTOR OIL BEAN.—See *Recinus*, page 67.

CELOSIA CRISTATA

(Cockscomb)

Showy, half-hardy annuals of easy cultivation; 1 foot; producing large, brilliant, comb-like flower heads.

Glasgow Prize.—Showy, dark crimson comb.
Pkt. 10c; $\frac{1}{8}$ -oz. 50c
Finest Mixed.—Rich mixture of finest dwarf kinds. Pkt. 10c; $\frac{1}{8}$ -oz. 40c

Celosia Plumosa

(Feathered Cockscomb)

The plant grows 2 to 3 feet, is of handsome pyramidal form, and the numerous massive plumes, which resemble an ostrich feather waving gracefully above the foliage, make it one of the most effective; of easy culture. Half-hardy annual.

THOMPSONI MAGNIFICA.—The most perfect feathered variety. July to November.
Golden Plume. Pkt. 10c
Crimson Plume. Pkt. 10c
Finest Mixture. Pkt. 10c; $\frac{1}{4}$ -oz. 50c



Chinese Wool Flower

CHINESE WOOLFLOWER

A new annual flower. Very showy, odd and novel. The bunches of wool-like glowing crimson flowers are produced in profusion. Flowers come early and do not fade until hit by frost. Height 2 to 3 feet. Start early and transplant after danger of frost is over. A large bed of these plants certainly produce a magnificent display and will be a dazzling blaze of color from early, until frost. Pkt. 15c; 2 for 25c; $\frac{1}{8}$ -oz. 75c

CENTAUREA

(Bachelor's Button—Cornflower)

Very popular annuals; will grow in the poorest of soil, either on seashore or mountains; seed can be sown either in fall or spring; sandy soil preferable; height 2½ feet.

Cyanus, Finest Single Mixed.
Pkt. 5c; $\frac{1}{4}$ -oz. 15c

CENTAUREA CYANUS fl. pl. (Double Bachelor's Button.)—Beautiful large double flowers.

Double Blue. Pkt. 10c; $\frac{1}{4}$ -oz. 35c
Double Mixed. Pkt. 10c; $\frac{1}{4}$ -oz. 25c

CENTAUREA IMPERIALIS (Giant Cornflower).—The flowers are of enormous size, fragrant and of charming colors; in form they resemble the fuzzy part of the thistle bloom. In colors from white to red to purple. Excellent for cutting.

Mixed Colors. Pkt. 10c; $\frac{1}{4}$ -oz. 35c
Marguerite.—Flowers 4 inches across; purest white. Pkt. 10c; $\frac{1}{4}$ -oz. 50c

MOSCHATUS (Sweet Sultan).—Hardy annual, with very fragrant and showy flowers; 1½ feet; June to September.

Finest Mixed. Pkt. 5c; $\frac{1}{4}$ -oz. 35c

SAUREOLENS (Grecian Cornflower).—Yellow flowers, showy. Pkt. 10c; $\frac{1}{4}$ -oz. 35c

White Leaved Centurea

(Dusty Millers)

These are grown for foliage only; half-hardy annuals; leaves are silver-coated.

CANDISSIMA.—Thick, white, upright cut leaves; 1 foot. Pkt. 10c; $\frac{1}{8}$ -oz. 50c

GYMNOCARPA.—Fine, fern-like leaves, very graceful and showy; 1½ feet. Pkt. 10c; $\frac{1}{8}$ -oz. 25c

CHRYSANTHEMUM

These are very showy flowers of easiest cultivation, flowering from July to frost; excellent for cutting; height 2 feet. (For plants, see page 77.)

Single Annual, Finest Mixed.
Pkt. 10c; $\frac{1}{4}$ -oz. 40c

Double Annual, Finest Mixed.
Pkt. 10c; $\frac{1}{8}$ -oz. 25c

LEUCANTHEMUM.—(See Shasta Daisy, under Daisies, page 57; Plants, page 85.)

CINERARIA

(Hybridi Grandiflora)

We pride ourselves in offering the choicest strain of this gorgeous flower; grand, large blooms in umbel spikes are borne way above the foliage; colors and markings are superb; 1½ feet; tender annual; start under glass, pot and keep inside for pots. Pkt. 35c

CLARKIA

This easily grown, hardy annual has been much improved in recent years, and the varieties offered below are now seen as cut flowers in most of the large cities. They do well either in sun or shade, growing 2 feet high, with leafy racemes of bright, pretty double flowers. Fine for cutting or massing in beds.

SEPARATE COLORS.—Double White, Crimson or Salmon Pink. Pkt. 10c; $\frac{1}{8}$ -oz. 50c

ELEGANS DOUBLE MIXED.
Pkt. 10c; $\frac{1}{8}$ -oz. 30c

We have Annual Flowering Plants in any quantity during April, May and June. See General Price List, page 79.

COSMOS

Beautiful autumn-blooming plants. They produce thousands of beautiful flowers in pure white, pink and crimson shades, furnishing an abundance of cut blooms for autumn decorations when other flowers are scarce. Can be sown in spring in the open ground, when danger of frost is past, or if wanted early the seed should be started under cover and afterwards transplanted. Set plants not less than 18 inches apart. When about a foot high, the tops should be pinched out to induce a bushy growth. They prefer a soil rather light and not too rich, but do well almost anywhere.

MAMMOTH EARLY FLOWERING.—A grand improvement over the first early flowering Cosmos introduced. "Early Mammoth" will give you a profusion of very large, graceful, long-stemmed flowers that will come into bloom in July and last until frost if planted early and given good care. This is a decided advantage where the seasons are short and where the "Giant Perfection" fails on account of its lateness to bloom.

Early White, Pink, Crimson or Mixed.

Pkt. 10c; 4-oz. 35c

Double Crested or Anemone Flowered

A new Cosmos of merit. "Double Crested" is unique and exceedingly pretty. Flowers are of good size, with full double centers, surrounded by a row of graceful ray petals. Very dainty and attractive and bring fancy prices as cut flowers. The plants are vigorous, branching and well covered with blooms from late summer until frost. Very beautiful for garden or table decoration. This new strain is not yet perfectly "fixed," but our stock is unsurpassed, producing fully 75 per cent new type flowers. Height, 4 feet. Pink Beauty, Crimson King or White Queen or Mixed.

Pkt. 15c; 3 for 30c; 1/8-oz. 50c

GIANT PERFECTION.—Very large and perfect flowers often 3 to 4 inches across; plants 5 to 6 feet high; blooms do not appear until October.

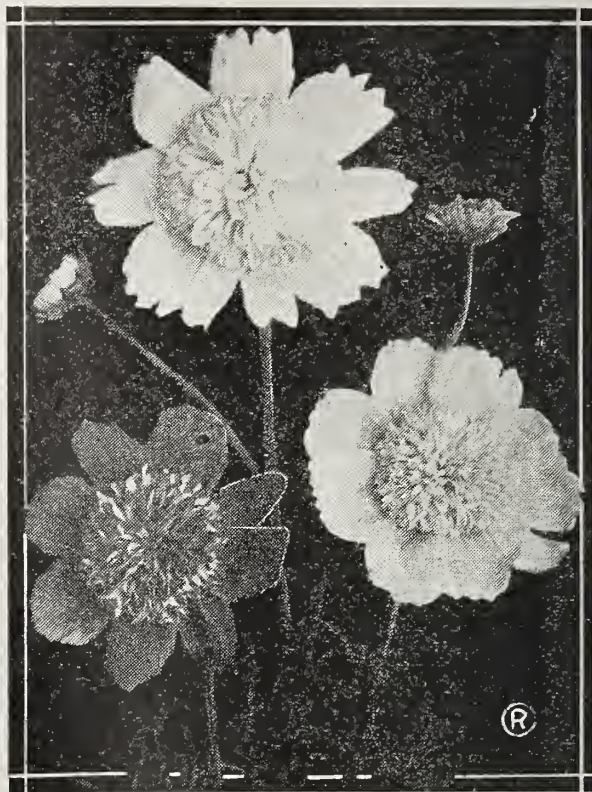
Giant White, Pink, Red or Mixed.

Pkt. 10c; 1/4-oz. 35c



Cobaea Scandens

KLONDYKE.—Deep golden yellow flowers, large and graceful, on long stems. Start "Klondyke" as it is a late flowering variety. Pkt. 10c; 1/8-oz. 35c



New Double Crested Cosmos

COREOPSIS

(Lanceolata Grandiflora)

Hardy perennial, with large, showy, bright yellow flowers, produced in the greatest abundance from June till frost. As a cut flower they stand near the head among hardy plants, having long stems and lasting in good condition a week or more. Easily grown from seed, flowering the first year, if sown early under glass.

Pkt. 10c; 1/8-oz. 35c

(See illustration and plants, page 85.)

COBAEA SCANDENS

Our most popular and rapid climbing annual, flowering the first season. Pretty, purple, bell-shaped flowers appear in great profusion during the fall months; foliage very graceful; 10 to 15 feet. Start seed under glass. (For plant, see page 79.)

Pkt. 10c; 1/4-oz. 35c

CYPRESS VINE

A fast-growing annual vine, with feathery dark-green foliage and star-like flowers, July to October; 20 feet. Plant early in light soil and warm location.

Finest Mixed.

Pkt. 10c; 1/4-oz. 25c

DAISIES

SHASTA DAISY.—Very popular and desirable perennial; the large single white flowers are freely produced on long stems. We offer you the best strain in plants or seed. (See cut in Plant Department, page 85.)

Pkt. 10c; 1/8-oz. 50c

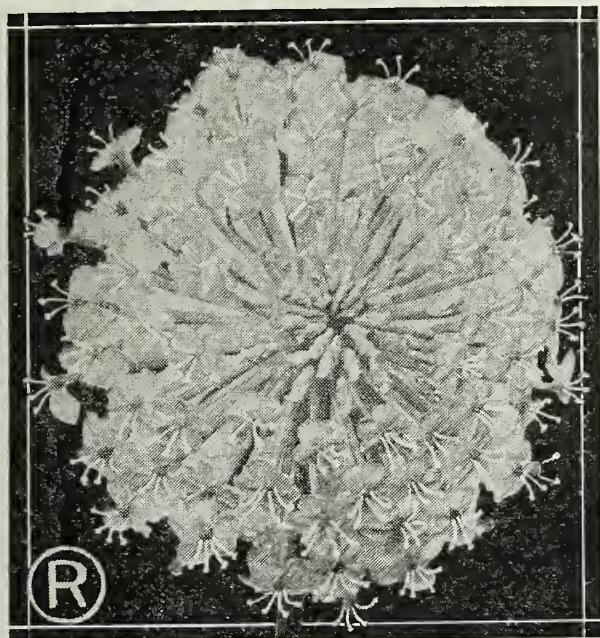
Double Daisies.—(See Bellis, page 82.)

African Daisy.—(See Dimorphotheca, page 57).

HAVE YOU PETS?

Note what we have to offer in Kittens, Puppies, Birds, etc., see pages 151 to 160.

CULTURAL DIRECTIONS FREE.—Our 2-page leaflet gives full instructions on growing flowers from seed. Free on request. Read it and be successful.



Deciduous—Lace Flower

DIDICUS—"Lace Flower"

Hugelia Coerulea
Rare, Dainty, Exquisite

A rare and lovely free-flowering half-hardy annual, growing about 18 inches high and branching nicely. Flowers light blue or lavender, very dainty and beautiful. The bloom is a cluster of tiny petaled flowers, quite full to the center, the pistils giving the appearance of dainty lace. Florists grow it under glass for cut flowers. Plants set in the garden bloom from June until late fall. A new flower here, but a native of Australia. (See cut.) Pkt. 20c; 3 for 50c; $\frac{1}{8}$ -oz. 75c

DELPHINUM

(Perennial Larkspur)

(See cut, page 83.) Handsome, hardy perennial plants for the herbaceous border and shrubbery, producing a profusion of splendid spikes of flowers throughout the summer. The beautiful, graceful, long-stemmed flower spikes make handsome bouquets and last well when cut. If started early will bloom the first season from seed. (For large plants for quick effect, see page 83.)

R. R.'s PRIZE MIXTURE.—Superb collection of the choicest colors; new, rare and beautiful shades. Makes wonderful cut flower material and should be planted generously. Pkt. 15c; $\frac{1}{8}$ -oz. 50c

CHINESE AZUREUM.—Branches very freely, produces its flowers in great abundance; clear, deep blue; height 3 feet.

Pkt. 10c; $\frac{1}{8}$ -oz. 25c

BELLADONNA.—Very free and continuous bloomer; delicate and beautiful; clear light blue, large flowers, 4 feet.

Pkt. 25c; 5 Pkts. \$1.00

FORMOSUM.—Long-spurred, brilliant blue flowers, with white center; 3 feet; July to October.

Pkt. 10c; $\frac{1}{8}$ -oz. 35c

CARDINALE.—Brilliant scarlet; very fine.

DAHLIA

This very popular flower can easily be raised from seed; started inside in March will produce flowers in August.

CACTUS MIXED.—Double flowers with pointed petals (see cut, page 91.) Pkt. 15c

DOUBLE FINEST MIXED.—Produce flowers of the "Show" or "Decorative Class." Pkt. 10c

DAHLIA — Continued

SINGLE GIANT PERFECTION.—Single flowers of great size and beauty. Pkt. 10c

DAHLIA BULBS.—Latest and best. (See pages 89 to 92.)

DIANTHUS—PINKS

(Garden Pink)

All varieties listed below are very desirable, and will flower the first season, even sown out of doors in May; they flower early and continue throughout the entire summer; they are excellent for cutting, and bedding; 1 foot.

CINENSIS (Chinese Pink).—Large, showy flowers in unlimited variety of bright colors. Pkt. 10c; $\frac{1}{4}$ -oz. 50c

HEDDEWIGII.—(Japan Pink.) Beautiful rich colors. A very popular variety. Finest Mixed. Pkt. 10c; $\frac{1}{4}$ -lb. 75c

FIREBALL.—New, extra double, brilliant, dark scarlet; very beautiful.

Pkt. 10c; $\frac{1}{8}$ -oz. 50c

SNOWDRIFT (Lanceineatus).—Extra large, pure white, double, fringed. Fine for border. Pkt. 10c; $\frac{1}{8}$ -oz. 50c

SPECIAL.—1 Pkt. each kind above only 35c.

PRIZE MIXTURE.—Very rich mixture, all kinds. Unequaled. Pkt. 10c; $\frac{1}{4}$ -oz. 75c

SEMPERFLORENS (Perennial Hardy Ever-blooming Garden Pinks).—Very beautiful, sweet-scented, double, semi-double and single flowers in great diversity of colors.

Pkt. 15c; $\frac{1}{8}$ -oz. 60c**DIMORPHOTHECA**

(African Daisies)

Hardy annual, great favorites on account of their extremely showy flowers, which are borne most profusely all summer; neat little plants 12 to 15 inches. They do well in dry, sunny situations. (See cut.)

AURANTIACA.—Its Marguerite-like blossoms, 2 inches in diameter, are of a peculiarly rich, glossy orange-gold. Its strikingly brilliant coloring is rendered even more conspicuous by the dark colored disc surrounded by a black zone. Plants bear showy flowers very soon after being set.

Pkt. 10c; $\frac{1}{8}$ -oz. 25c

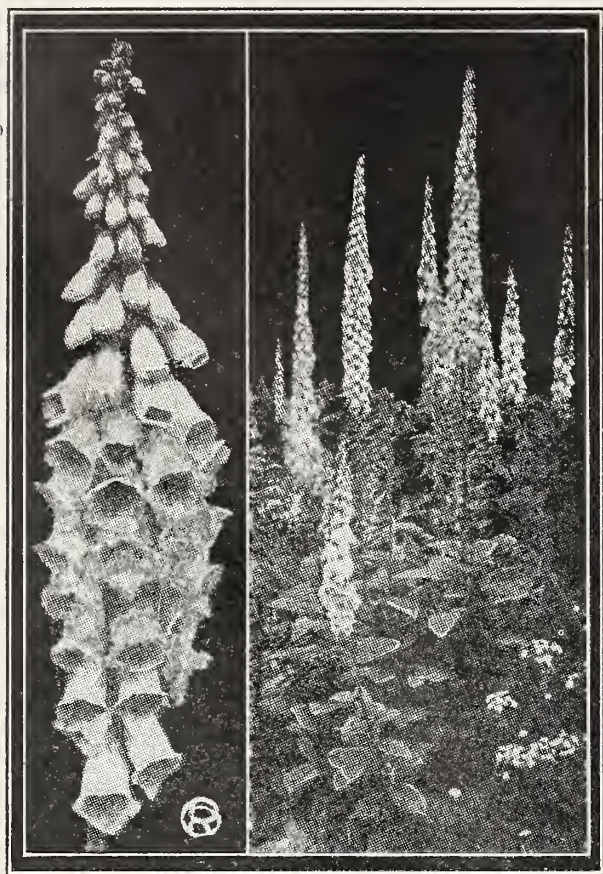
AURANTIACA HYBRIDS.—They range in color from purest white to red and bluish white tints, sulphur, lemon and bright golden yellow, golden orange, reddish yellow changing to light salmon-rose, superb shades of salmon—very light to deep orange-salmon. There are also varieties with different colored zones; rare shades, rich and interesting. Pkt. 10c; $\frac{1}{8}$ -oz. 25c



Dimorphotheca—African Golden Daisy

See Bird and Pet Dept., pages 150 to 160.

A HEDGE of Free Flowering Dahlias is AS BEAUTIFUL and more showy than a hedge of ROSES. They are in full bloom when other flowers ARE SCARCE. See pages 89 to 92.



Digitalis—Foxglove Plant and Flower Spike

DIGITALIS

(Foxglove)

Hardy perennials; very desirable for effective massing or grouping; invaluable either in the hardy border, between shrubs or in solid beds in open or shady places; 3 to 5 feet. For strong field-grown flowering plants, see page 83.

GLOXINAEFLORA.—A fine strain with handsome spotted gloxinia-like flowers.

White, Purple, Rose or Mixed.

Pkt. 10c; $\frac{1}{8}$ -oz. 25c

GRANDIFLORA YELLOW.—Light yellow in good spikes.

Pkt. 10c; $\frac{1}{8}$ -oz. 25c

MONTROSA (Mammoth Foxglove).—The tall spikes of flowers are surmounted by one monstrous bloom; all colors mixed.

Pkt. 10c; $\frac{1}{8}$ -oz. 25c

BEAUTY MIXTURE.—A grand mixture of all kinds, colors and shades.

Pkt. 10c; $\frac{1}{8}$ -oz. 50c

DOLICHOS

(Hyacinth Bean)

Annual climbers; beautiful foliage and clusters of hyacinth-like purple and white flowers, borne in clusters; 10 feet; July.

White, Purple or Mixed. Pkt. 10c; oz. 25c

ESCHSCHOLTZIA

(California Poppy)

One of the most popular garden annuals; 1 foot. Sow the seed where plants are to remain in the fall or early spring. It stands considerable cold and blooms early, profusely and continuously until July. Later sowings for late flowers. (See cut.)

Finest Mixed.—All shades. Pkt. 10c; oz. 40c

Californica.—Bright yellow. Pkt. 10c; oz. 40c

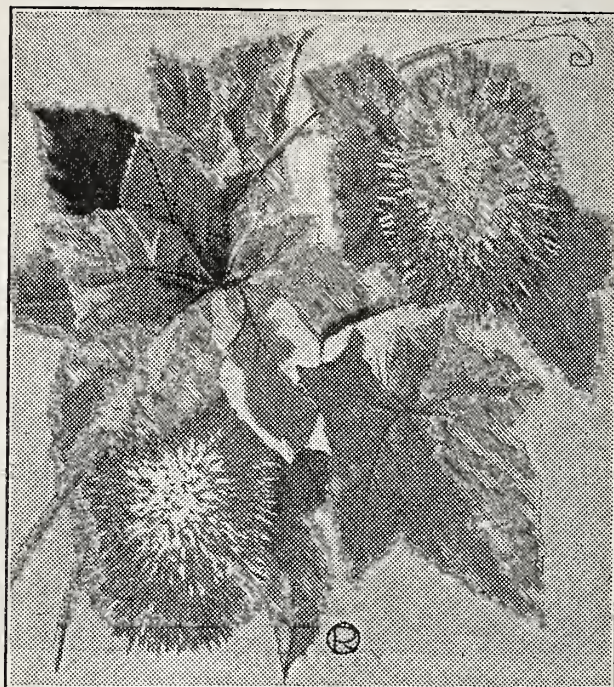
Alba.—Pure white. Pkt. 10c; oz. 40c

Carmine King.—A beautiful rose carmine.

Pkt. 10c; $\frac{1}{4}$ -oz. 25c

Golden West.—Very large, bright yellow flowers with orange centers.

Pkt. 10c; oz. 40c



Echinocystis—Wild Cucumber

ECHINOCYSTIS LOBATA

(Wild Cucumber)

The fastest-growing annual vine in existence; will grow 20 feet in six weeks; pretty foliage and inconspicuous white flowers; soak seed in water over night before planting in dry weather.

Pkt. 10c; oz. 35c

GAILLARDIA

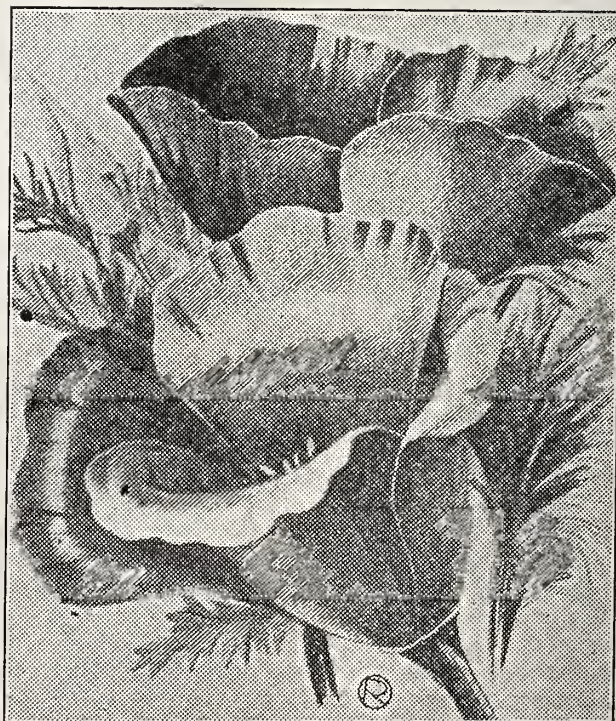
(Blanket Flower)

Splendid, showy plants for beds or borders; excellent for cutting; the hardy perennial varieties; if sown early will bloom the first season; July to frost; $1\frac{1}{2}$ feet. (Field-grown plants, page 83.)

GRANDIFLORA SUPERBA.—Hardy perennial, splendid mixed single varieties in crimson and gold. Pkt. 15c; $\frac{1}{8}$ -oz. 35c

LORENZIANA.—Hardy annual; double flowers in red and yellow shades.

Pkt. 10c; $\frac{1}{8}$ -oz. 25c



Eschscholtzia—California Poppy

FEED YOUR PLANTS. You must supply "food," in other words fertilizer, if you want the best results. Read about "Wonder" and "C-M," pages 38 and 39.

Wild Flower Gardens

Try a packet of our "Wild Flower Garden"; something new and interesting to see most every day. See page 73.

GEUM

MRS. BRADSHAW.—A beautiful hardy perennial, bearing profusely showy double dark-crimson flowers all through the summer; an elegant flower for bouquets.

Pkt. 10c; $\frac{1}{8}$ -oz. 50c

GOMPHRENA

(Globe Amaranth)

A dwarf hardy annual, with pretty clover-like beads of purple, white and red flowers; 2 feet; flowers everlasting.

Finest Mixed. Pkt. 5c; $\frac{1}{4}$ -oz. 25c

GODETIA

(Satin Flower)

This showy, hardy annual deserves greater popularity. Attractive flowers of satiny texture, from white to all shades of pink and crimson. They grow rapidly and flower profusely in poor soil, or easy cultivation. Fine for seashore or mountain resorts; 1 foot; July to October.

White, Bright Red or Finest Mixed.

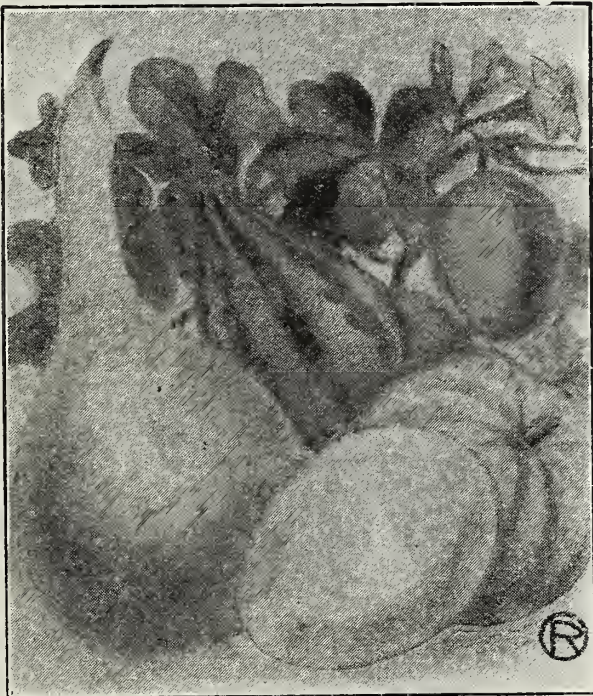
Pkt. 10c; $\frac{1}{4}$ -oz. 35c

GOURDS

These are desirable in many places where an immense amount of vine is wanted quickly. Most sorts are good for 20 feet in a season and the blooms of some are quite striking and handsome. With many sorts the fruit is unique and ornamental and often useful. The small fancy gourds are excellent toys for children.

Calabash.—The famous pipe gourd, dipper shaped. Pkt. 10c; oz. 40c

Egg, Orange, Turk's Turban, Pear, Spoon or Mixed, all kinds. Pkt. 10c; $\frac{1}{4}$ -oz. 15c

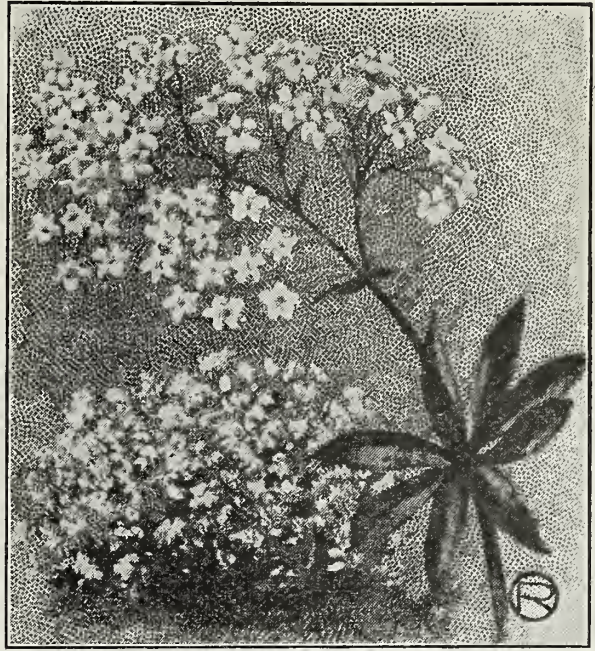


Ornamental Gourds

GYNERIUM

(Pampas Grass)

ARGENTEUM.—Hardy perennial; the famous Pampas Grass, with beautiful silvery plumes; 10 feet. Pkt. 10c



Gypsophila—Baby's Breath

GYP SOPHILA

(Baby's Breath)

Pretty free-flowering, elegant plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut flowers. The annuals should be sown early in the spring and mid-summer for a continuous supply.

ELEGANS ALBA.—Hardy annual, easily grown from seed; flowers pure white; 2 feet; June. Pkt. 10c; $\frac{1}{4}$ -oz. 25c

ELEGANS ROSEA.—Hardy annual; flowers bright rose; very dainty; 2 feet. Pkt. 10c; $\frac{1}{4}$ -oz. 35c

MURIALS.—Hardy perennial; plants dwarf, about 6 inches; flowers shell pink; fine for borders or rock work. Pkt. 10c; $\frac{1}{4}$ -oz. 35c

PANICULATA.—Hardy perennial; one of the finest for cutting; pure white flowers, very small, and borne in large, delicate sprays; June to September; 3 feet. Pkt. 15c; $\frac{1}{8}$ -oz. 25c

PANICULATA FL. PL.—New, double-flowering. White. Pkt. 25c; 3 for 60c

(For strong roots of G. Paniculata for immediate effect, see page 83.)

HELIANTHUS

(Sunflower)

Hardy annual Sunflowers are indispensable for cutting and a bright display of yellow flowers in the garden. Plant early in a sunny place and have a constant supply of flowers until cut down by severe frosts. We offer some improved types of special merit.

GLOBOSUS FISTULOSUS (Globe or Dahlia Sunflower). Flowers large, double, very full in the center and of a rich saffron color; 6 feet; annual. Pkt. 10c; oz. 25c

CUCUMERIFOLIUS — STELLA (Improved Miniature Sunflower). Grows about 3 feet tall, covered with pretty single flowers of the purest golden yellow, with black disc. Fine for cutting. (See cut, next page.) Pkt. 10c; $\frac{1}{4}$ -oz. 25c

MORE HARDY FLOWERING SHRUBS should be planted in the West—they give no trouble, increase in size and grow more beautiful year by year. See pages 99 to 106.



Helianthus—New Miniature

ORION.—Artistic and effective new variety of "Stella." The petals are twisted like a Cactus Dahlia. Pkt. 10c; 1/4-oz. 40c

NEW MINIATURE MIXED.—A multitude of new varieties have been raised from the popular Miniature Sunflower, which we offer in mixture. They all differ from the parent, most of them being larger, and many with curiously twisted petals. The prevailing colors are pale yellow, golden yellow and creamy white, some with black centers, and all beautiful; for cutting they are indispensable. Pkt. 10c; 1/4-oz. 50c

PERENNIAL MIXED.—A choice mixture of the best perennial varieties.

Pkt. 15c; 1/8-oz. \$1.00

HELIOTROPE

Delightfully fragrant, half-hardy perennial; popular pot and garden bedding plant; also for cutting. Some of the best plants may be raised from seed very readily; 1½ feet; start inside or under glass.

FINEST MIXED. Pkt. 10c; 1/8-oz. 35c



Heliotrope

HOLLYHOCK

One of the most majestic of hardy plants, and a clump or line in any garden gives an effect not attainable with any other plant. For planting among shrubbery or forming a background for other flowers, it is without equal. Seed sown any time before late summer will produce fine plants for flowering next year.

CHATER'S DOUBLE.—Our superb strain of this is the best that can be produced; seeds saved from the most double flowers.

White, Rose, Crimson, Yellow, Maroon or Mixed. Pkt. 10c; 1/4-oz. 75c

NEWPORT PINK.—New. The finest pure pink variety, exquisite in shade, flowers double. Pkt. 15c; 1/8-oz. 40c

ALLEGHENY. — Semi-double; mammoth flowers, having the edges of the petals finely fringed and lacinated; will bloom the first year if sown early.

Choicest Mixed. Pkt. 10c; 1/4-oz. 50c

NEW ANNUAL EVER-BLOOMING.—Seeds sown in the house in March will produce flowers in July on plants 4 feet high; however, the plants do not attain their perfection until their second year, when they grow 6 to 8 feet high, and flower continuously from June till frost.

Single Mixed. Pkt. 10c; 1/4-oz. 50c

Double Mixed. Pkt. 15c; 1/4-oz. 75c

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HOLLYHOCK  
PLANTS IN  
ALL COLORS  
OFFERED ON  
PAGE 84  
~~~~~



Double Hollyhock

HUNNEMANNIA

FUMARIAEFOLIA (Giant Yellow Tulip Poppy).—Hardy annual; foliage fern-like; flowers tulip-shaped, golden yellow; very showy; July to frost.

Pkt. 10c; 1/4-oz. 35c

HUMULUS.—See next page.

HUMULUS

(Japanese Hop)

Hardy annual climber; of rapid growth; attains a height of 12 feet.

JAPONICA VARIEGATA.—Foliage green and white; very pretty and effective; not affected with insects. Pkt. 10c; 1/4-oz. 50c

ENGLISH HOP ROOTS. Pg. 115. Each 15c



Humulus—Japanese Hop

KOCHIA

SUMMER CYPRESS or BURNING BUSH.—

Annual; forms dense bushes of upright plumage-like foliage; during the summer they remain light green and in early fall they change to carmine and blood red; 2 feet; make a dainty and showy hedge or nice single specimens.

Pkt. 10c; 1/4-oz. 25c

KUDZU VINE

(Pueraria Thumbergiana)

A twisting vine of remarkably rapid growth, attaining a length of 40 to 50 feet in one season from established roots; hardy perennial, though the vine dies down every winter in the North. Foliage large and lobed; purple, pea-shaped flowers in clusters, borne late in the season. A fine vine for arbors, verandas, etc. Easily grown from seed.

Pkt. 10c; 1/4-oz. 35c

LARKSPUR—Annual

Unsurpassed by any other hardy annual. Seed sown in the open ground in April or May will produce flowers from July to frost. Their free, graceful habit and lovely bright flowers are very effective for beds or borders. Charming cut flowers for decoration.

DOUBLE STOCK FLOWERED.—The finest variety with splendid sprays of beautiful flowers; 2 feet. White, Rose, Lustrous Carmine—"Newport Pink," Light Blue, Dark Blue. Pkt. 10c; 1/4-oz. 60c

Special 1 Pkt. Each, 5 Colors, 40c

Double Stock Flowered, Mixed.

Pkt. 10c; 1/4-oz. 50c

DOUBLE DWARF ROCKET.—1 foot; compact growing bush, splendid spikes of double flowers in all colors.

Mixed. Pkt. 10c; 1/4-oz. 25c

EMPEROR.—Tall, slender spikes of exquisite double flowers in unlimited quantity and of delicate shades; 3 feet.

Mixed.

Pkt. 10c; 1/4-oz. 35c

PERENNIAL LARKSPUR.—(See Delphinium, page 57; plants, page 83.)

LATHYRUS LATIFOLIUS

PERENNIAL SWEET PEA.—Free flowering, hardy perennial climbers, bearing beautiful flowers all season.

White or Pink.

Pkt. 15c; 1/2-oz. 60c

Mixed.

Pkt. 10c; 1/2-oz. 50c



Trailing Lobelia

LOBELIA

ERINUS GRACILIS.—Trailing, excellent for vases, hanging baskets and window boxes. Bright blue flowers. Pkt. 10c; 1/8-oz. 25c

HYBRIDA SAPPHIRE (New).—This is by far the most beautiful trailing Lobelia to date; very large, deep sapphire blue flowers, with a large and clear white eye; very free and early flowering; extra long trailer, for baskets and boxes. Pkt. 25c; 3 for 60c

CRYSTAL PALACE COMPACTA.—Little dwarf bedding plant; dark blue flowers cover the whole plant during the entire season; very compact and used extensively in carpet bedding or edging; height 4 inches. Pkt. 15c; 1/8-oz. 60c

WHITE GEM.—Compact little plants, covered with snow-white flowers. Pkt. 10c

CARDINALIS (Cardinal Flower).—Hardy perennial garden plant, with spikes of deep cardinal red flowers; August and September; 3 feet. Pkt. 15c; 1/8-oz. \$1.00

BUY a package of WONDER ODORLESS FERTILIZER and feed your plants according to directions. YOU WILL BE PLEASED at the results. See page 38.

LUPINUS

Ornamental, free-flowering, easily grown, with long, graceful, upright spikes of rich and variously colored pea-shaped flowers; valuable for mixed borders and beds.

ANNUAL DWARF MIXED.—Valuable for cutting; 2 feet. Pkt. 10c; 1/4-oz. 35c

POLYPHYLLUS MIXED.—Showy perennials, growing stout and erect; good for cutting, flowers in white, rose and blue colors; 3 feet; May and June.

Pkt. 10c; 1/4-oz. 25c



African Marigold

MARIGOLDS

The African and French Marigolds are old favorite free-flowering annuals of easy culture; both are extremely effective. The African have uniformly large yellow or orange-colored flowers, and are well adapted for large beds or mixed borders; the French are dwarfier in growth, with beautifully striped flowers, and better suited for low beds or borders; they succeed best in a light soil, with full exposure to the sun. A vase or bowl of any of the rich yellow sorts, in combination with a few blue Larkspurs or Cornflowers, is very striking.

TALL AFRICAN.—(See cut.) Splendid for cutting and decoration; 3 feet.

Orange Prince.—Enormous double flowers of rich deep golden orange.

Pkt. 10c; 1/4-oz. 40c

Lemon Queen.—Extra large double flowers of a clear canary yellow.

Pkt. 10c; 1/4-oz. 40c

Eldorado.—Double flowers of large size in all shades of yellow. Pkt. 10c; 1/4-oz. 35c

Tall African Mixed.—All shades.

Pkt. 10c; 1/4-oz. 25c

DWARF FRENCH.—These form small, compact bushes about 12 inches high, covered with smaller but very rich colored flowers. Fern-like foliage.

Dwarf Golden.—Flowers ball-shaped, pure golden yellow. Pkt. 10c; 1/4-oz. 40c

Dwarf Brown.—Rich reddish-brown or mahogany marked with orange; double.

Pkt. 15c; 1/4-oz. 50c

Dwarf Gold Striped.—Very double, mahogany red, striped with gold.

Pkt. 10c; 1/4-oz. 50c

Dwarf French Mixed.—All shades.

Pkt. 10c; 1/4-oz. 35c

Tall French Mixed.—2 feet.

Pkt. 10c; 1/4-oz. 25c

MARVEL OF PERU

(Four o'Clock)

Hardy annual, flowering from July to October; brilliant colors; 3 feet.

Finest Mixed. Pkt. 10c; oz. 25c

MESEMBRYANTHEMUM

Dwarf trailing plants of great beauty, blooming the whole summer, thriving best in a dry, loamy or sandy soil; half-hardy annuals; 12 to 15 inches.

TRI-COLOR.—Very dainty, pointed petaled, brilliant salmon-pink flowers. Pkt. 15c

CRYSTALLINUM (Ice Plant).—Flowers white, prized for its singular icy foliage.

Pkt. 15c

MIMULUS

MOSCHATUS (Muskplant).—A pretty, trailing plant with small yellow flowers, giving forth a musk-like fragrance; fine for hanging baskets, etc. Annual. Pkt. 15c

MIGNONETTE

(Reseda)

A universal favorite; very fragrant; no home garden is complete without Mignonette. It needs a cool soil only moderately rich; grows 8 to 15 inches high and is treated as a half-hardy annual. (See cut.)

GRANDIFLORA.—Large-flowering, sweet, fragrant, spikes of greenish yellow color.

Pkt. 5c; oz. 25c

DEFIANCE.—Giant spikes; flowers abundant and very fragrant. Pkt. 10c; 1/4-oz. 15c

GOLIATH RED.—Excellent for pots or garden; highly colored, fragrant flowers.

Pkt. 10c; 1/8-oz. 25c

WHITE PEARL.—New; the best white flower; very attractive. Pkt. 10c; 1/8-oz. 35c

Our 2-page
Leaflet
"HOW TO
GROW FLOW-
ERS FROM
SEED,"
Free on
Request



Mignonette—Flower Spikes

GLADIOLI BULBS make a beautiful display when in bloom and are of the easiest culture and really not expensive, as they multiply rapidly. See page 89.

MORNING GLORY

(Ipomoea)

The tall varieties are popular, well known, rapid-growing climbers of the easiest cultivation; very fine for covering arbors, trellises, porches, etc.; give them rich soil and a warm situation. The Minor or Dwarf varieties flower very freely.

CONVOLVULUS MAJOR.—Tall, choice, single mixed; all colors. Pkt. 10c; oz. 25c

CONVOLVULUS MINOR.—Dwarf mixed. Very spreading; 12 inches. Pkt. 10c; oz. 25c

IMPERIAL JAPANESE FRINGED.—These have very large fringed flowers in a great variety of the most exquisite colorings; handsome foliage. Pkt. 10c; oz. 35c

DOUBLE MIXED. Pkt. 15c; ¼-oz. 35c

CHOICE PRIZE MIXTURE.—This is a mixture of both American and Japanese varieties; very choice. Large Pkt. 10c; oz. 25c (Note.—Soak the Japanese Morning Glory seed in warm water for 24 hours before planting.)

MYOSOTIS

(Forget-Me-Not)

Few spring flowers are more admired than the lovely Forget-Me-Nots, which are especially effective when grown in masses. Hardy perennials if given slight protection through the winter.

Seed may be sown any time from spring till mid-summer. The Alpestris and Dissitiflora come into bloom in April, and are largely used for bedding between plantings of Dutch flowering bulbs. The Palustris sorts do not bloom till May, but continue till fall. Perennial plants, page 83.

DISSITIFLORA.—Rich blue; early flowers in fine sprays; 6 inches. Pkt. 15c; ⅛-oz. \$1.00

ALPESTRIS VICTORIA.—Of bushy habit; bearing large, double, bright blue flowers; yellow eye; very fine; 6 inches. Pkt. 10c; ⅛-oz. 60c

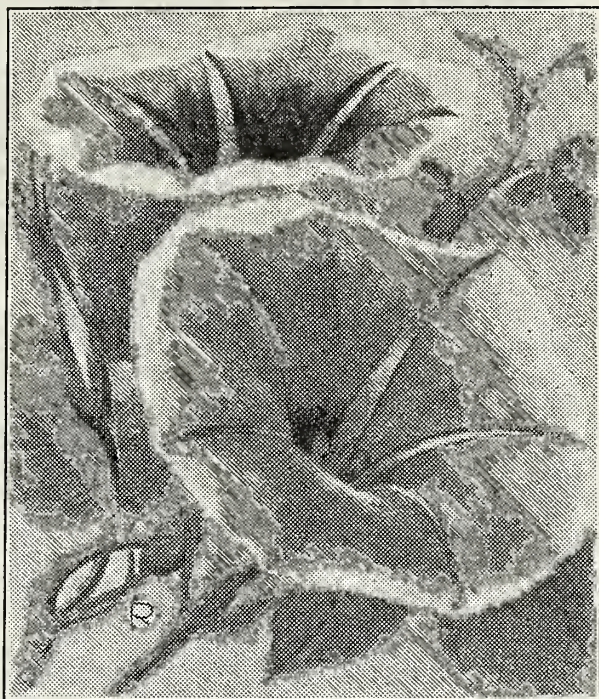
ALPESTRIS ROYAL BLUE.—Rich indigo blue; 9 inches. Pkt. 15c; ⅛-oz. 35c

FINEST MIXED.—A mixture of blue, rose and white varieties. Pkt. 10c; ⅛-oz. 25c

PALUSTRIS SEMPERFLORENS.—Perennial; flowers bright blue; blooms from early spring until autumn. Pkt. 15c; ⅛-oz. \$1.00



Myosotis—Forget-Me-Not



Morning Glory

MOONFLOWER—Ipomoea

GRANDIFLORA ALBA.—Large, heart-shaped leaves, and large, pure white flowers, which open only late in the evening; 10 feet. Pkt. 15c; ¼-oz. 25c

NEMESIA

GRANDIFLORA COMPACTA TRIUMPH.—A very pretty, half-hardy, free-flowering annual; the plants grow about a foot high and the beautiful, dainty flowers are very varied in color, including rose, yellow, blue, orange, etc. An ideal bedding plant. Seed sown in the autumn makes beautiful pot plants for early spring blooming.

Mixed Colors. Pkt. 15c; ⅛-oz. \$1.00

NICOTIANA

One of the easiest annuals to raise and one of the most effective. The flowers are long tubed, star-shaped, and are produced in great profusion. The flowers open toward evening and emit a powerful perfume.

AFFINIS.—Delightfully sweet-scented, pure white flowers, blooming continually; 2 to 3 feet. Pkt. 10c; ¼-oz. 50c

AFFINIS HYBRIDA.—Splendid hybrids in blue, red and rose, etc., shades. Pkt. 10c; ⅛-oz. 50c

SANDERAE.—Of elegant branching habit, and bearing on light, graceful stems great quantities of very beautiful rosy carmine flowers; all-summer valuable border plant; 3 feet. Pkt. 10c; ⅛-oz. 35c

NIGELLA

(Love in a Mist—Devil in the Bush)

A compact free-flowering plant with finely cut foliage and pretty feathery flowers; hardy annuals; blue and white; 1½ feet.

Double Mixed. Pkt. 10c; ⅛-oz. 15c

MISS J'EKYLL.—A lovely variety with cornflower blue blossoms; splendid for cutting. Pkt. 10c; ⅛-oz. 25c

NASTURTIIUM — TALL OR CLIMBING

The most popular and most beautiful free-flowering annual climbing vines. These are all of strong, vigorous growth, throwing out running shoots that can be trained upon strings or wires, or can be readily made to climb ordinary paling fences or wire netting. They are very showy also planted at the top of a steep slope and allowed to run down the bank. We offer only the finest strains, producing the largest and richest flowers.

Your choice, Pkt. 10c; full collection, 8 kinds, 50c; per oz., any kind, 20c.

Asa Gray.—Light yellow, almost white.

Black Prince.—Velvety crimson, dark leaved.

Firefly.—Bright yellow, spotted cardinal red, calyx and spur ruby; very pretty and showy.

Golden Queen.—Sunflower yellow, very fine.

Primrose.—Creamy yellow, very pleasing.

Princess Victoria Louise.—Cream white, scarlet spot.

Regina.—Beautiful light salmon.

Spitfire.—Bright fiery scarlet.

Tall Prize Mixture

Routledge Tall Prize Mixture.—This is undoubtedly the finest mixture of tall nasturtiums offered anywhere; every shade is grown separately and then mixed; dark leaved. Large Pkt. 10c; oz. 25c; ¼-lb. 75c

Tall Choice Mixed.—A very fine selection of beautiful varieties.

Large Pkt. 10c; oz. 20c; ¼-lb. 60c

Ivy-Leaved, Finest Mixed.—The ivy leaves, borne on very slender stems, are of a dark metallic color, which forms a striking contrast to the beautiful flowers; an excellent variety for vases, hanging baskets, etc. Pkt. 10c; oz. 25c

Variegated Queens.—A new strain of tall Nasturtiums having beautifully variegated leaves; green, white and yellow; flowers large and of many bright colors.

Superb Mixed Pkt. 10c; oz. 25c

Tillamook, Ore., Feb. 14, 1921.

Routledge Seed & Floral Co.

Dear Sirs: I always get a large sack of Wonder Fertilizer for my flower beds, boxes, etc., and with the seeds I get from you I have had wonderful flowers. People have asked me why they are so much more beautiful and why they grow so good and I sure tell them.

I am, respectfully,

MRS. FLORENCE STILLWELL.

Alsea, Ore., Aug. 12, 1921.

Routledge Seed & Floral Co.

Dear Sirs: I have now planted your seed two seasons and like them better than any other seed that I have tried.

Yours truly,

LULU P. VERNON.

For permanent and hardy climbing flowering vines and trailers, see pages 104 and 105.

PENTSTEMON

(Beard Tongue)

The handsome, brilliant flowers are borne on long terminal spikes, much resembling Gloxinias. Perennial; will bloom the first season if sown early; 3 feet. All colors from yellow to red and purple.

HYBRIDA MIXED. Pkt. 10c; ⅛-oz. 60c



DWARF NASTURTIIUMS

These are of dwarf, compact, rounded growth and are especially desirable for planting as borders to flower-beds or along garden walks. As with all Nasturtiums, they succeed best on light, well-drained soils or in slightly raised beds.

Aurora.—Terra cotta, reddish orange.

Beauty.—Yellow and scarlet, very pretty.

Bronze.—Reddish golden bronze, rich.

Crystal Palace Gem.—Rich yellow, spotted maroon.

Empress of India.—Dark scarlet, dark leaved.

Golden King.—Rich Indian yellow, dark leaved.

Vesuvius or Salmon Queen.—Salmon rose.

Price, all above Dwarf varieties, Pkt. 10c;

Selection of 7 Pkts. 50c; per oz. 25c.

R. R.'s Dwarf Beauty Mixture

Composed of new and rare sorts; exceedingly brilliant and beautiful. A mixture of very lovely, true dwarf varieties.

Large Pkt. 10c; oz. 25c; ¼-lb. 75c

CHOICE DWARF MIXED.—Not equal to above, but far superior to most mixtures.

Large Pkt. 10c; oz. 20c; ¼-lb. 60c

PORTULACA

Low-growing or creeping tender annual, six to eight inches high, and bearing glossy, cup-shaped blossoms in very brilliant and gorgeous colors. The foliage and stems are thick. The seed germinates slowly and should be started under glass or when the weather is hot. These flowers love the sunshine and do best on rather dry ground; excellent for embankments.

Single, Finest Mixed. Pkt. 10c; ⅛-oz. 35c

Double, Finest Mixed. Pkt. 15c; ⅛-oz. 60c

GROW "PRIZE FLOWERS" by using "WONDER ODORLESS FERTILIZER." But do not use TOO MUCH, it is very RICH. See page 38.

GIANT PANSIES

Pansy Plants, Page 79

This popular flower thrives best on a cool, moist, but well-drained soil enriched with well-rotted barnyard manure or fine ground bone. Seeds sown early will produce fine plants for summer blooming. The florists' method, though, is to sow in July or August, and protect the plants during the winter, and they will flower continuously early the following spring and summer.

ROUTLEDGE PRIZE MIXTURE.—For variety of markings, beauty of form, size and splendid texture, this superb strain cannot be excelled. Pkt. 25c; $\frac{1}{8}$ -oz. \$1.25

STEELE'S MASTODON.—This superb strain is famous among professional florists everywhere. Flowers rare and rich in colors and of giant size; Oregon grown. Mixed. Pkt. 20c; $\frac{1}{8}$ -oz. \$1.00

GIANT TRIMARDEAU.—The most popular bedding strain for this locality, and deservedly so, on account of the strong, sturdy plants and the enormous flowers of the greatest variety of colors.

Finest Mixed. Pkt. 15c; $\frac{1}{8}$ -oz. 60c

ENGLISH SHOW.—A choice strain; large flowers; beautiful colors.

Pkt. 10c; $\frac{1}{8}$ -oz. 50c

CHOICE MIXED.—A fine bedding strain.

Pkt. 5c; $\frac{1}{8}$ -oz. 35c

New Giant Pansies of Special Merit

Your choice, Pkt. 25c; full collection of 10 packets for \$2.00

MLLE. IRENE.—New. New color in pansies, Tango Red; a grand flower, long stem.

MLLE. ISABELLE.—Novelty, ruffled bronze and yellow; a giant in size.

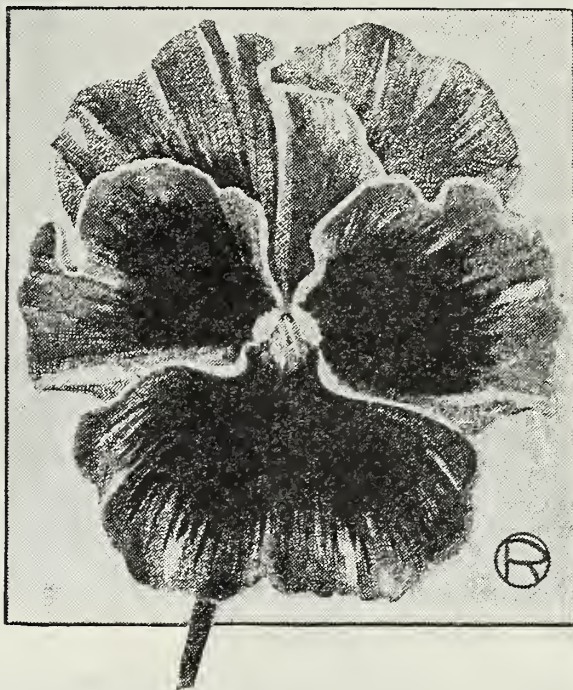
VULCANO.—Novelty. A rich velvety Burgundy red; immense flowers.

PANAMA PACIFIC.—A huge deep yellow, some pure yellow, others with dark eyes.

MADAME STEELE.—A giant, true royal purple. A very profuse bloomer.

BRONZE MASTODON.—Giant, all shades from bronze to old gold; wonderful colors.

Our new product, "C-M," Dry-Kiln Pulverized Cow Manure, is the ideal fertilizer for your Pansy beds. (See page 39.) It makes those giant flowers you admire.



Phlox Drummondii

ADONIS, NEW.—Of huge size, light blue, baby blue and lavender shades.

PRINCE HENRY.—Giant, splendid dark blue.

MADAME PERRETT.—Distinct and beautiful type, edges filled; dark wine pink and red.

GRAND DUKE MICHEL.—A giant, pure white. The best in this color.

PHLOX DRUMMONDI

One of the showiest and most easily raised of all annuals. We know of nothing which produces such a continuous supply of the most attractive flowers in a most wonderful range of colors; 1 foot. Seed should be sown in the ground as soon as danger of frost is over and in a few weeks the beds are a blaze of glory.

SEPARATE COLORS.—White, Pink, Rose, Scarlet, Lilac, Primrose or Striped.

Pkt. 10c; $\frac{1}{8}$ -oz. 35c

DRUMMONDI GRANDIFLORA, MIXED.—A splendid mixture of all shades and colors.

Pkt. 10c; $\frac{1}{4}$ -oz. 35c

DECUSSATA (Tall Perennial Phlox).—One of the finest perennials with its extremely large heads of the most magnificent colored flowers, blooming in August and September. Pkt. 10c; $\frac{1}{8}$ -oz. 60c

PHLOX PLANTS.—(See page 84.)

PLANTS.—Large flowering, choice pansy plants, ready very early in the spring. Can be safely sent by mail.—Blooming plants, 12 in a basket, by express. See page 79.

PETUNIA

One of our easiest cultivated and freest flowering annuals. Will succeed almost anywhere and give a continuity of the most brilliant bloom from June till killed by frost. Excellent for balcony or porch boxes. The strains we offer are the very choicest obtainable.

SINGLE VARIETIES

Ruffled Giants, Prize Mixture

Ruffled Giants, Prize Mixture.—This strain produces in great profusion enormous flowers, having edges of petals beautifully ruffled and fluted; of great variety of colors, many being beautifully veined; unsurpassed for size and beauty.

Pkt. 35c; 1,000 seeds \$3.00

New Fringed Hybrid

A lovely petunia with charming fringed flowers of exquisite forms and beautiful colors. Not equal in size to Ruffled Giant, but they are more delicate and really beautiful.

Pkt. 25c; 3 for 60c

LARGE-FLOWERED FINEST MIXED.—Fine large flowers in superb mixture.

Pkt. 15c; 1/8-oz. 50c

FINE MIXED.—An assortment of medium-sized flowers; fine for bedding.

Pkt. 10c; 1/8-oz. 25c

New—Separate Colors

PINK TRIUMPH—NEW.—Well named for it is a triumph of the breeder's skill. Of large size, beautifully ruffled, a clear, bright pink. A charming free-flowering variety.

Pkt. 20c; 3 for 50c

GIANT WHITE.—Unrivalled for beauty of texture and size. A glistening satiny white with yellow throat. A fine companion to the above.

Pkt. 20c; 3 for 50c

BALCONY PETUNIAS.—A new and splendid free, large-flowering type for windows, baskets, vases or bedding.

Balcony Rose, Balcony White.

Pkt. 20c; 2 for 35c

ROSY MORN.—Soft carmine pink, with white throat. A wonderful bloomer and fine for border.

Pkt. 15c; 1/8-oz. 75c

DOUBLE PETUNIAS

All of our Double Petunias are selected with greatest care, and contain as large a percentage of double flowers as it is possible to obtain.

GIANT DOUBLE, FINEST MIXED HYBRIDS.—A new and exceptionally fine strain; unsurpassed for the large, beautifully colored double flowers.

Pkt. 50c; 500 seeds \$3.00

GIANT DOUBLE MIXED.—Large fringed flowers of wonderful form and beauty. Quite true.

Pkt. 35c; 500 seeds \$2.50

CHOICE DOUBLE MIXED.—Large per cent of double flowers.

Pkt. 25c; 500 seeds \$2.00



New Fringed Hybrid

POPPY—PAPAYER

Universal favorite of the easiest culture. They produce a wealth of the most beautiful and showy blooms. Both perennial and annual poppies bloom the first year from early-sown seed. Perennial varieties will, but annuals will not, transplant safely, therefore sow the annuals where they are to remain and thin out, giving each plant ample room to grow and develop.

ADMIRAL (Annual).—A single variety of surpassing beauty; large flowers of glistening white, with a broad band of brilliant scarlet around the top; produce a magnificent effect.

Pkt. 10c; 1/4-oz. 20c

MISS SHERWOOD (Annual).—Single, bears large flowers of a satiny white, shaded a silky chamois rose, a combination of rare delicacy.

Pkt. 10c; 1/4-oz. 25c

CARNATION FLOWERED (Annual).—Splendid double fringed flowers.

Mixed Colors. Pkt. 10c; oz. 35c

CALIFORNIA POPPY.—(See Eschscholtzia, page 58.)

ANNUAL SUPERB MIXTURE.—A superior strain, containing the choicest of single and double varieties in all of the brightest colors.

Pkt. 5c; oz. 50c

ICELAND, OR NUDICAULE (Perennial).—These are of a very graceful, neat habit, with bright green, fern-like foliage, formed in tufts, from which issue slender stalks, about 12 inches in height, bearing beautiful brilliant single flowers in endless profusion, and most useful for cutting. (For plants, see page 84.)

Yellow, White, Scarlet. Pkt. 10c; 1/8-oz. 40c

Single Mixed. Pkt. 10c; 1/4-oz. 50c

Double Iceland Mixed.—Very choice strain, double flowers.

Pkt. 15c; 1/8-oz. 50c

PLANT COLLECTIONS FOR HANGING BASKETS.—We will send a fine collection of eight choice trailing plants for 75c postpaid.

POPPY—Continued

FLANDERS.—The scarlet poppy of the fields of Flanders, made famous in the song and story of the great war and familiar to all members of the A. E. F. who served in Belgium and France. Remarkable for their tenacity of growth and their profuse flowering quality, there seemingly being no end to their productiveness.

Flowers satiny, crinkled bright scarlet, nicely poised on slender stems. About the size of Shirley. Apart from the sentiment now attached to them they are a decided acquisition. Flower first season from early-sown seed. Pkt. 10c; ¼-oz. 25c

SHIRLEY (Annual). — Charming poppies. Flowers single and semi-double, and range in color from the purest white through the delicate shades of pale pink, rose and carmine to the deepest crimson and blood-red, while many are daintily edged and shaded. The petals are like silk. Free-blooming and fine for borders or beds; 1½ to 2 feet. Mixed. Pkt. 10c; oz. 50c

GIANT ORIENTAL POPPIES

Among hardy perennials these hold an unrivaled position for gorgeous effectiveness. Height 2 to 3 feet, flowers immense, often 6 inches across. Excellent cut for decoration. Plant in the open ground in June or July to bloom the following season.

Oriental Brilliant.—Bright scarlet, black spots at base of each petal. Pkt. 10c; ½-oz. 40c

Oriental Princess Victoria.—A beautiful salmon-pink; wonderful flower. Pkt. 15c

Oriental—Perry's White.—Very distinct, pure satiny white with a crimson-maroon block at base of each petal. Pkt. 15c

Oriental Hybrids Mixed.—All colors. Pkt. 10c; ½-oz. 35c

PRIMULA

(Primrose)

The first two varieties named below are hardy, early-blooming garden plants, and the others beautiful winter-blooming house plants. Their various forms and blending of colors are exceedingly pleasing and effective. They thrive best in a rich, loamy soil.

POLYANTHUS (Veris Mixed).—Early blooming, dwarf growing plants, valuable for outdoor bedding and edging, 8 inches, perennial.

Mixed. Pkt. 15c

VULGARIS (Veris Aurea).—Yellow, common, English Primrose; hardy garden variety; perennial; 8 inches. Pkt. 15c

OBCONICA GRANDIFLORA HYBRIDS.—A lovely, profuse bloomer, bearing beautiful clusters of single flowers for pots only. Pkt. 25c

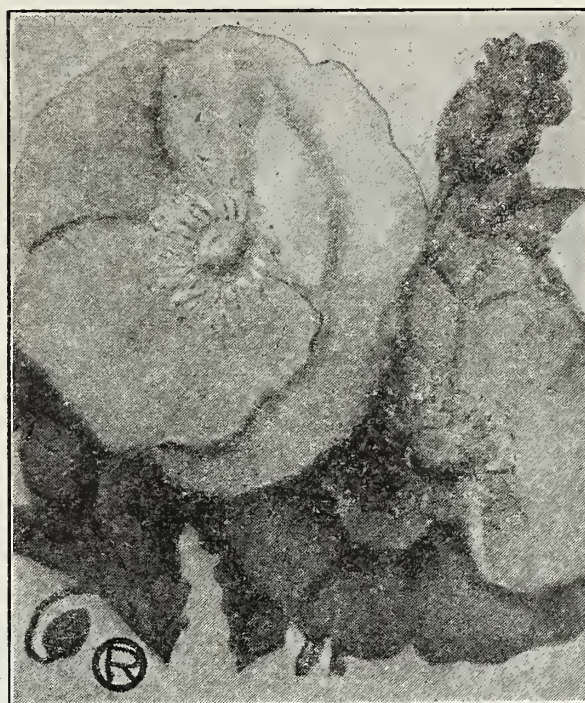
SINENSIS OR CHINESE PRIMROSE.—Beautiful, large, fringed flowers; especially fine for winter and spring flowers in the house; free bloomers. Pkt. 35c

Finest Mixed.

PYRETHRUM

AUREUM.—Golden Feather.—Half-hardy, perennial; valuable for edging, as their yellow foliage makes a fine contrast with other bedding plants; 6 inches. Pkt. 10c

HYBRIDUM GRANDIFLORUM.—Produce in early spring and again in the fall, large daisy-like flowers in a wide range of colors. Excellent for cutting. Pkt. 15c; ½-oz. 35c



Shirley—Poppy

RICINUS

(Castor Oil Bean)

A magnificent and highly ornamental plant, with picturesque foliage and stately growth combined with brilliant colored fruit of the giant varieties. Grown as single specimens on lawns and on pleasure grounds, they form a striking feature; hardy annuals.

ZANZIBARENSIS, Mixed.—Very ornamental; dark bronzy green and red leaves; 8 to 10 feet high. Pkt. 10c; oz. 35c

SANGUINEUS TRICOLOR.—Blood red stems, deep green leaves, with red veins; 6 feet. Pkt. 10c; oz. 35c

GIBSONI.—New dark red foliage; 5 feet. Pkt. 10c; oz. 50c

FINEST MIXED.—All kinds. Pkt. 10c; oz. 25c

RUDBECKIA

(Cone Flower)

BICOLOR SUPERBA.—Fine free-flowering annual variety; 2 feet; producing in great abundance on long stems its bright yellow double flowers. (Plants, page 85.) Pkt. 10c

FULGIDA.—Hardy perennial sort, producing in masses during August and September brilliant orange-yellow flowers; 3 feet. Pkt. 10c

NEWMANI.—Perennial; large, bright orange-yellow flowers, dark centers. Pkt. 15c

SALPIGLOSSIS

Produces very showy, funnel-shaped flowers of large size; fine for beds and cutting; half-hardy annuals.

GRANDIFLORA MIXED.—Large flowering, of the choicest colors. Pkt. 15c; ½-oz. 35c

SCHIZANTHUS

(Butterfly Flower)

Beautiful garden annuals; flowers charmingly fringed and delicately colored; 1 to 2 feet. Blooms quickly from seed.

GRANDIFLORA MIXED. Pkt. 10c; ½-oz. 25c

HOW TO GROW FLOWERS FROM SEEDS.—Our two-page leaflet gives full information and is free on request.



Salvia

SALVIA

(Scarlet Sage)

The Scarlet Sage has long been a favorite bedding plant, bearing long spikes of brilliant scarlet flowers in great profusion from July till frost; seed should be sown as early as possible, either indoors or in a hotbed, and the young plants transferred to their flowering quarters when the weather has become settled and warm.

SPLENDENS COMPACTA.—A splendid, showy variety, with large spikes of bright rich scarlet flowers; 3 feet.

Pkt. 10c; $\frac{1}{8}$ -oz. 50c

ZURICH.—A splendid new dwarf, of special merit; very early, generally 10 days ahead of any other. Brilliant scarlet and very free-flowering; 15 to 18 inches.

Pkt. 20c; $\frac{1}{8}$ -oz. 75c

BONFIRE.—Of dense bushy yet compact growth; useful for bedding or wide borders. Flowers dark, rich scarlet, on spikes which stand clear of the foliage and attract attention at once; 2 feet.

Pkt. 20c; $\frac{1}{8}$ -oz. 60c**SCABIOSA**

(Morning Bride—Pin Cushion Flower, Etc.)

The hardy annuals are easily grown from seeds sown after danger of frost is over. Their beautiful, dainty flowers are freely produced from July to frost; 2 feet. For cut flowers they are wonderful, lasting for nearly a week.

SEPARATE COLORS.—Double Lavender, Rose, Yellow, Scarlet or White.

Pkt. 10c; $\frac{1}{8}$ -oz. 35c

Finest Mixed.—Large, double flowers.

Pkt. 10c; $\frac{1}{8}$ -oz. 25c**SWEET WILLIAM**

Hardy biennial, well known and very popular. The handsome, showy heads of brilliant flowers from June to September are very effective.

Dark Crimson, White, Pink Beauty or Mammoth Single Mixed. Pkt. 10c; $\frac{1}{8}$ -oz. 35c

Double Mixed.—All colors

Pkt. 10c; $\frac{1}{8}$ -oz. 40c**SNAPDRAGON**

See Antirrhinum.

Page 52

SHAMROCK

TRUE IRISH.

Pkt. 25c

STOCK

(Gilliflower)

By far one of the most popular annuals for garden or greenhouse culture. They are superb for cutting and are of great value for bouquet work. Flowers are of delicious fragrance, large, mostly double, and borne on handsome spikes; all will flower the first year. They are very hardy and often remain in bloom in the yard all winter in the vicinity of Portland. Sow in February or March for early blooms and in June for fall or winter flowers, and transplant.

LARGE-FLOWERED TEN WEEKS.—A splendid double-flowered strain, especially adapted for bedding and pot culture; pyramidal spikes of brilliantly colored flowers; 2 feet.

Finest Mixed.

Pkt. 10c; $\frac{1}{8}$ -oz. 60c

GIANT PERFECTION, OR CUT-AND-COME AGAIN.—Grown for us by experts and the greatest possible care is taken in the selection of good seed. Of branching habit; two feet, and 85 to 90 per cent of large, double flowers; fine for cutting and garden.

White, Light Blue, Crimson, Dark Blue, Pink, Rose, Yellow, or Finest Mixed.

Pkt. 15c; $\frac{1}{8}$ -oz. 75c

BEAUTY OF NICE.—A handsome, new winter and summer stock of quick growth; flowers of large size, double, and freely produced; 2 feet.

Mixed.—All colors.

Pkt. 15c

Princess Alice.—Double white.

Pkt. 15c

Queen Alexandra.—Soft rosy lilac.

Pkt. 15c

Beauty of Nice.—Delicate flesh pink.

Pkt. 15c

SUNFLOWER

See Helianthus.

Pages 50-60



Double Stocks

THUNBERGIA

Extremely pretty yellow flowers with dark eye; rapid-growing annual trailers; used largely for vases, window boxes, etc.; will flower all summer till frost; 5 feet.

Finest Mixed.

Pkt. 10c; $\frac{1}{4}$ -oz. 50c

PERENNIAL FLOWERS are rapidly gaining in favor. **MORE** should be planted; they are beautiful in borders, beds or among shrubbery, and flower each year. See pgs. 82 to 85.

SWEET PEAS "Highest Quality" TRUE VARIETIES

1922 PRIZE COLLECTION NEW GIANT SPENCERS Rare, Rich and Wonderful

Collection Price, 12 Lovely Kinds
(value \$1.35), ONLY \$1.00

ENCHANTRESS

A magnificent soft rose-pink self, of truly giant proportions, undoubtedly the best of its class. A flower of great substance with broad spreading and beautifully waved standard.
Pkt. 15c; oz. 60c

KING WHITE

Well and truly named; it certainly is "the king" of all white Sweet Peas. In color, size and beauty of flower, length of stem and vigor, King White is unsurpassed.
Pkt. 10c; oz. 60c

FIERY CROSS

Color a scorching fire-red or orange-scarlet, which scintillates and glitters in bright sunlight, thus adding a glowing fire-like sheen which radiates over the flower. Classed as cerise.
Pkt. 10c; oz. 60c

MARGARET ATLEE

Beautiful large flowers of a rich cream-pink; very double and frilled extra.
Pkt. 10c; oz. 50c

DOBBIE'S LAVENDER

Undoubtedly the best of the lavender varieties, grand for exhibition and garden decoration; strong grower, gives plenty of fours.
Pkt. 10c; oz. 60c

SCARLET EMPEROR

The most intense pure scarlet in existence. The bold flowers are of large size and are almost sunproof.
Pkt. 15c; oz. 75c

ROYAL PURPLE

Of great merit. A true, rich, royal purple that holds its color. Flowers of giant size and elegant form.
Pkt. 10c; oz. 60c

MELBA

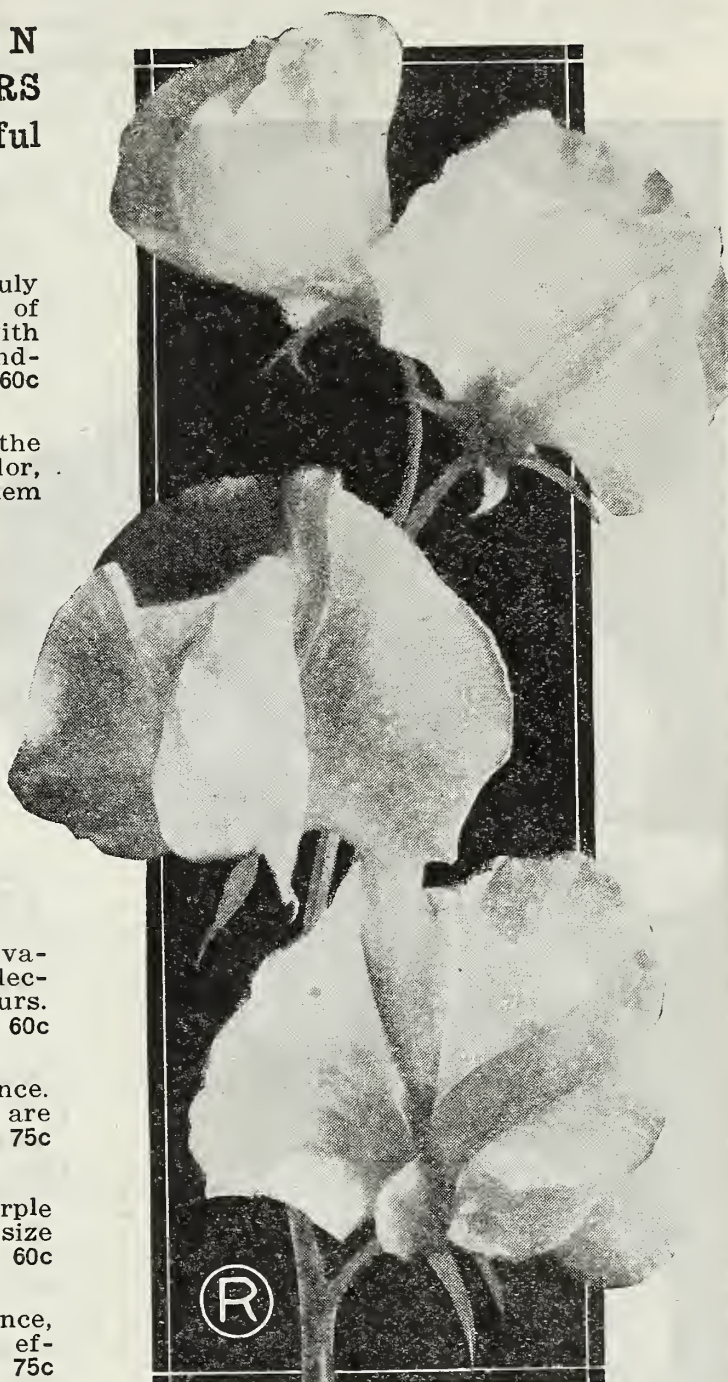
A wonderful flower in size and substance, rich and glowing salmon-orange; very effective.
Pkt. 15c; oz. 75c

MRS. RAUTZAHN

The flowers are of extra large size, great substance, and produced in fours on long stems and in wonderful profusion. Color lovely light pink.
Pkt. 10c; oz. 65c

NUBIAN

Flowers of great size, perfectly formed and placed. Lovers of dark shades will appreciate Nubian, which is the finest deep wine-red or maroon.
Pkt. 10c; oz. 50c



ILLUMINATOR

Glowing cerise-salmon. The large flowers come four on a stem, well placed and beautifully waved. Very vigorous, profuse bloomers.
Pkt. 10c; oz. 75c

DOBBIE'S CREAM

Undoubtedly the deepest, most richly colored of all the cream varieties. Large flowers, beautifully waved.
Pkt. 10c; oz. 50c

Early or Winter Flowering Spencer Sweet Peas

This new class of Sweet Peas is the best for the florist to force under glass or for extra early flowers outside. They grow and flower earlier than the Giant Late Spencer. Excellent for sections where the season is late and short or very hot and dry. Plant early.

Early Helen Lewis.—Orange-salmon.

Early Liberty.—Large, bright crimson.

Early Lavender King.—Beautiful lavender.

Early Morning Star.—Orange-scarlet; extra.

Early Peace.—Rose-pink on cream.

Early Snowflake.—Grand, pure white.

Early Torch.—A lovely orange shade.

Early Spring Maid.—Light pink.

Early Aviator.—Dazzling crimson-scarlet.

PRICES.—Your choice, 15c Pkt.; 2 for 25c; full collection of nine Pkts, \$1.00; 1-oz. any kind 75c.

EARLY SUNRISE MIXTURE.—A very select mixture of early varieties.

Pkt. 10c; oz. 60c

BE SURE BEFORE PLANTING to Treat Your Pea Seeds With MULFORD'S CULTURE.
Page 41.

UP-TO-DATE SPENCER SWEET PEAS OF REAL MERIT—Continued

NOTE.—New crop of Sweet Pea Seeds very, very short. Highest quality True Stock cannot be sold for less. We classify under colors for your convenience.

SPECIAL.—Make up your own collection—60c worth for 50c; \$1.25 for \$1.00.

WHITE

ETTA DYKE.—One of the largest and most exquisitely formed pure white Spencers. Beautifully waved; color absolutely pure.

Pkt. 10c; oz. 50c

CONSTANCE HINTON.—A very hardy and one of the largest White Spencers to date. A beautiful, large flower. Black seed, strong vitality.

Pkt. 10c; oz. 60c

KING WHITE.—See Prize Collection, page 69.

WHITE SPENCER.—A pure white, of large size and splendid substance; long, strong stems.

Pkt. 10c; oz. 40c

PRIMROSE—YELLOW

PRIMROSE SPENCER.—A lovely primrose; nicely waved, abundance of bloom; strong and vigorous.

Pkt. 10c; oz. 60c

DOBBIE'S CREAM.—See Prize Collection, page 69.

PINK ON CREAM

HENRIETTA.—A charming variety; the giant flowers are rich, rosy pink on cream, a bright yet delicate pink.

Pkt. 10c; oz. 60c

ETHEL ROOSEVELT.—Giant flowers of finest form. A most charming rich pink on cream. Magnificent.

Pkt. 10c; oz. 50c

MARGARET ATLEE.—See Prize Collection, page 69.

LIGHT PINK

MRS. ROUTZAHN.—See Prize Collection, page 69.

MRS. HUGH DICKSON.—One of the best light pink to date. A European variety of sterling merit.

Pkt. 10c; oz. 50c

ELFRIDA PEARSON.—A lovely combination of apricot and pink. Beautiful, large, wavy flowers.

Pkt. 10c; oz. 60c

PINK

ENCHANTRESS.—See Prize Collection, page 69.

COUNTESS SPENCER.—Flowers extremely large, beautifully expanded, crumpled and waved. Color soft shell pink, deeper at the outer edges.

Pkt. 10c; oz. 50c

LAVENDER

ASTA OHN SPENCER.—Color a beautiful lavender; flowers large, wavy and generally come four blossoms to the stem. Very popular.

Pkt. 10c; oz. 50c

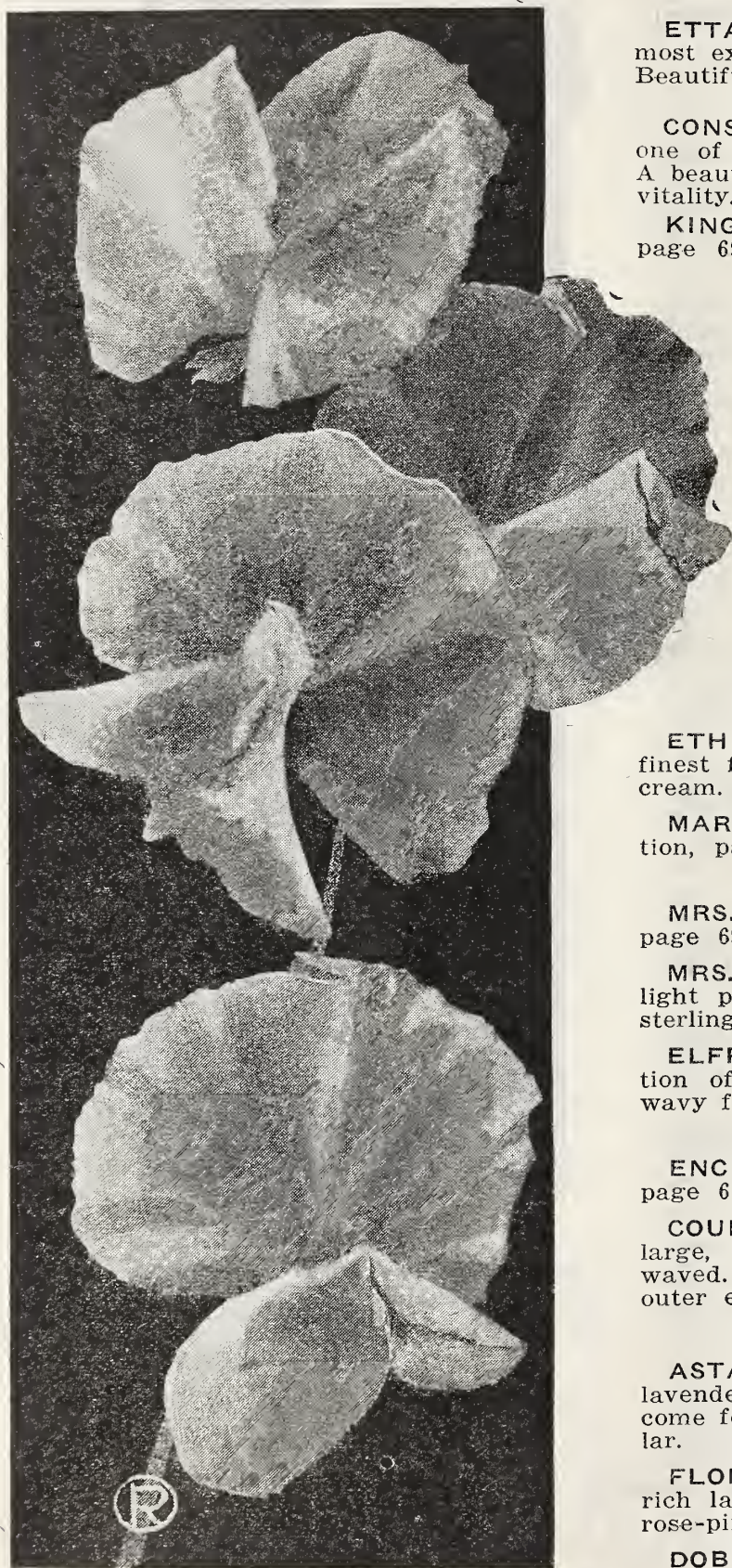
FLORENCE NIGHTINGALE.—A soft, clear rich lavender enlivened by a faint sheen of rose-pink.

Pkt. 10c; oz. 60c

DOBBIE'S LAVENDER.—See Prize Collection, page 69.

R. F. FENTON.—The flowers are of largest size. The color is a delightful soft silvery-blue or lavender; an exhibition variety.

Pkt. 10c; oz. 60c



Treat your Sweet Peas with MULFORD'S CULTURE; makes stronger vines, more and larger flowers. (See page 41.)

PRIZE SWEET PEAS.—If you want to grow giant flowers on long stems, you must give your sweet peas good soil, plenty of water at the roots in dry weather, some Wonder Fertilizer, and pick the flowers often. Our "leaflet" tells all—free with each order. Use "C. M." in the Sweet Pea trench. See pages 38-39.

UP-TO-DATE SPENCER SWEET PEAS OF REAL MERIT—Continued

No seed house offers a more select list. We classify under colors for your convenience

NOTE.—New crop of Sweet Pea Seeds very, very short. Highest quality True Stock cannot be sold for less.

SPECIAL.—Make up your own collection—60c worth for 50c; \$1.25 for \$1.00.

ORANGE AND SALMON

NOTE.—To get the most delicate shade in this color, flowers should be lightly shaded.

BARBARA.—Salmon colored self of large size. It makes a "telling" bunch either for exhibition or table decoration, and is most effective. Pkt. 10c; oz. 60c

DECORATOR.—The color is old rose with a sheen of terra cotta giving a bright orange effect. The placement and poise of the flower is perfect. Pkt. 15c; oz. 75c

MELBA.—See Prize Collection, page 69.

ILLUMINATOR.—See Prize Collection, page 69.

THOMAS STEVENSON.—The flowers, of largest size and finest Spencer type, are of an intense flaming orange throughout. A grand exhibit on variety. Unsurpassed in color and beauty. Pkt. 15c; oz. 65c

ROBERT SYDENHAM.—A magnificent glowing orange self. Beautiful, large flowers. Pkt. 10c; oz. 60c

BLUE—PURPLE

NEW MARGARET MADISON.—Flowers clear azure blue self—a color that always attracts and is so effective. Pkt. 10c; oz. 50c

ROYAL PURPLE.—See Prize Collection, page 69.

WEDGEWOOD.—Flowers true light blue in color and of fine, large, full, wavy form, some duplex. Pkt. 10c; oz. 40c

SCARLET—CRIMSON

FIERY CROSS.—See Prize Collection, page 69.

KING EDWARD SPENCER.—Of vigorous growth, profuse bloomer, giant flowers; most popular scarlet red, long stems. Pkt. 10c; oz. 50c

SUNPROOF CRIMSON.—An intense pure scarlet self-color of rare beauty and substance. Absolutely sunproof. A stocky, vigorous grower, profuse bloomer, the long, strong stems carry four perfect flowers. Pkt. 10c; oz. 50c

SCARLET EMPEROR.—See Prize Collection, page 69.

MAUD HOLMES.—An English introduction and superior to others in this color. Elegant form and type and a beautiful crimson scarlet, giant, wavy flowers, four to a stem. Pkt. 10c; oz. 50c

DARK RED—MAROON

KING MANOEL.—A giant-flowered maroon or deep wine red that is sure to please all who admire rich shades. Of perfect form. Pkt. 10c; oz. 40c

NUBIAN.—See Prize Collection, page 69.

PICOTEE AND STRIPED

SENATOR SPENCER.—Beautiful large flowers, claret and chocolate on light ground; distinct and greatly admired; a profuse bloomer. Pkt. 10c; oz. 60c

MARTHA WASHINGTON.—A most beautiful variety; blush-white with a very distinct picotee-edge of rose-pink. Light and dainty. Pkt. 10c; oz. 60c

Rose City Mixture of Grandiflora Sweet Peas

Extraordinary care has been taken in the selection of the varieties and the quantities of each to make up the mixture, and the result is one that cannot fail to excite the admiration of every flower lover. Of course the flowers of the Grandiflora type are not as large as the "Spencers," but the range of color is complete and they are hardy and very free flowering.

Large Pkt. 10c; oz. 20c; ¼-lb. 50c; lb. \$1.50

SEE 1922 SUPERB COLLECTION AND SUPERB MIXED NEXT PAGE.

Cupid Sweet Peas

Compact dwarf plants, seldom growing over six inches high. Flowers of good size and at the top of short, stiff stems. Try something new and showy for edgings or a border to other flowers. They are unique and pretty. Of trailing nature. (See cut.)

Cupid Mixed, Pkt. 10c; oz. 25c; ¼-lb. 75c

A NEW CUPID—Spencer Midshipmite

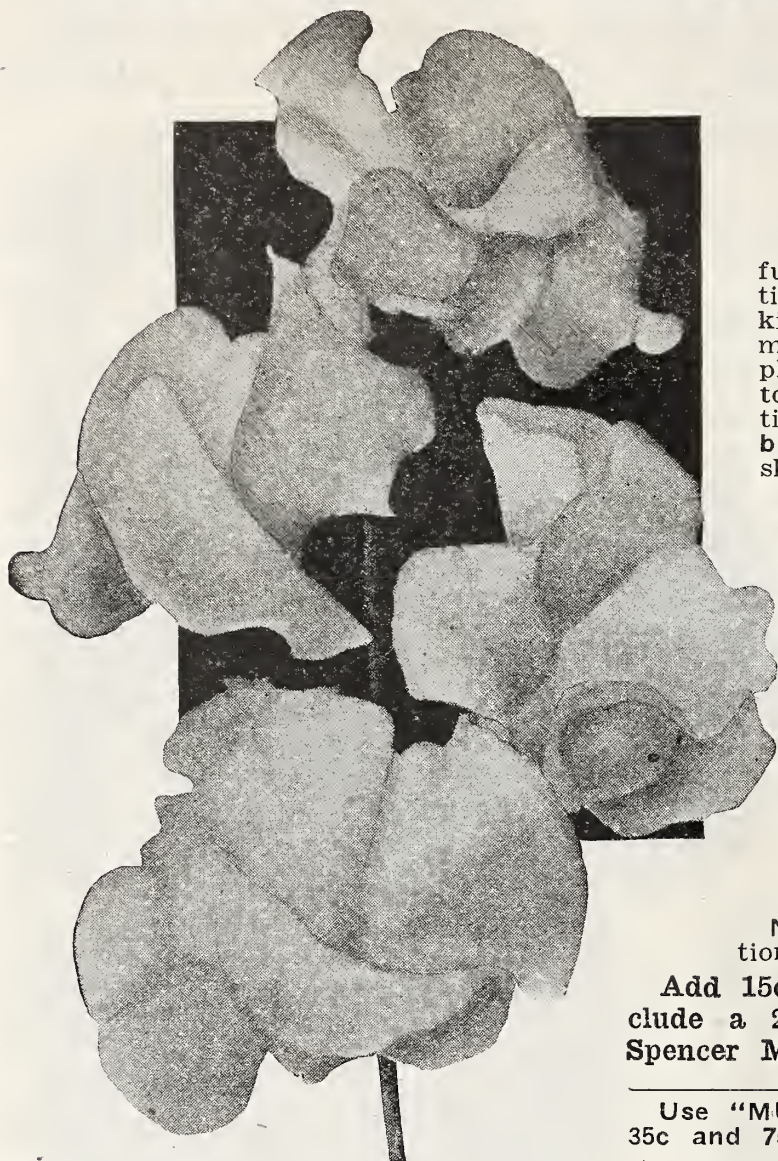
A new Cupid of Spencer form and size. Grows only four inches high, forming a plant 18 inches in diameter. Blossoms four to a stem, large and frilled. Color, white, suffused and edged violet blue, a shy seeder, therefore blooms the whole season. Try this novelty. Pkt. 25c; 3 for 50c



QUALITY and TRUENESS is what makes the price in Sweet Peas. Low prices never bought "HIGHEST QUALITY" Seeds. Use Mulford's Culture; see page 41.

SWEET PEAS OF HIGHEST QUALITY—Continued

Some others may have as good, but none any finer Sweet Pea Seed than we.

**Sweet Pea Special**

Superb 1921 Collection of
7 Giant Spencers
75c Collection for 50c

We have put up, in one large, beautifully lithographed envelope, seven distinct and new Giant "Spencers"; each kind in a separate packet and properly marked. The seed in each packet will plant a row 3 to 4 feet or a total of 20 to 30 feet. With good care and cultivation these will produce **thousands of blooms** which you can pick in separate shades; an ideal way for special effect.

This collection contains our leaflet "How to Grow Prize Sweet Peas," and one full-sized packet of the following distinct and popular colors:

R. F. Fenton.—A beautiful lavender.

Hercules.—A lovely light pink.

White Spencer.—A large, pure white.

King Manoel.—Dark red-maroon, a giant, free-bloomer.

Margaret Atlee.—Beautiful cream-pink.

Thos. Stephenson.—Rich bright orange.

Sunproof Crimson.—Intense pure scarlet.

Note.—For full description see classification under "Separate Colors," pages 70-71.

Add 15c Extra or 65c in all and we will include a 25c packet (1 oz.) of R. R. Superb Spencer Mixture. (Described below.)

Use "MULFORD'S CULTURE" for Sweet Peas, 35c and 75c sizes. (See page 41.)

R. R.'s Superb Mixture of Giant Spencer Sweet Peas

This is our own special mixture and is composed only of the best giant orchid-flowering wavy Spencer varieties, also contains some new seedlings of promising merit, that have not as yet been named. For healthy, robust growth, wealth of blooms, size of flowers and exquisite and rare colorings, this mixture is unequalled.

Put up and for sale in sealed packages only, 1/2-oz. pkts. 15c; oz. pkts. 25c each; 3 for 60c; 6 for \$1.00.

TRITOMA

(Red Hot Poker)

Striking and exceedingly ornamental autumn flowering plant. Showy flower spikes, shaded red and yellow; 3 feet. (See cut and plants, page 85.)

Pkt. 10c; 1/8-oz. 50c

VALERIANA

(Garden Heliotrope)

A fine old-fashioned hardy plant; flowers have a strong heliotrope odor; showy, red or white; fine for bouquets; 2 feet.

Mixed. Pkt. 10c; 1/8-oz. 25c

Wild Flower Garden — Mixture

This is a mixture of easy growing, hardy annual and perennial flower seeds, embracing a wide range of different kinds and colors. Very desirable for sowing broadcast along walks, shrubbery, pathways, roadways or in the garden. With little or no care they will produce a bright effect and furnish an abundance of flowers for cutting. If you wish to get the largest returns plant in a prepared bed and when the plants are a few inches high, transplant here and there or wherever wanted. You will derive a great amount of pleasure from watching the development of the flowers from the unknown plants.

Prices—Well filled pkts. 10c; oz. 35c.



Can you think of anything nicer than an abundance of flowers for yourself and your friends who have no grounds? See our special Sweet Pea collection, page 69.

ROUTLEDGE PRIZE ZINNIAS

The Zinnia is one of the most brilliant, showy and satisfactory annual flowers. It has long been a general favorite, but with the wonderful new and "late creations" produced by "Zinnia specialists" in the last few years it now is probably the most popular flower of the day.

For mass planting, cut flowers and decorations they are unsurpassed, producing a wonderful display from July until heavy frosts.

New Dahlia Flowered

This new, giant, double-flowered Zinnia (see cut) is a wonder in size, shape, new colors, perfection and profusion of flowers. Plants grow sturdy and vigorous, about 3 feet high. Flowers 5 to 6 inches across, full and deep and of the most wonderful shade. All of the usual colors and many rare, such as salmon, old rose, pink, cerise, strawberry red and autumn tints. We offer a very select strain of seed.

DAHLIA-FLOWERED PRIZE MIXED
Pkt. 15c; 1/8-oz. 50c

Double Giant Zinnias Robusta Grandiflora

These are of the giant or mammoth flowering type and are in every way superior to the common kinds. Flowers are borne on long, stiff stems and are of a semi-globular form, mostly very double. Plants grow 2½ to 3 feet high, covered with myriads of immense flowers, many measuring from 4 to 6 inches across and all of lovely rich and rare colors. Care, cultivation and plenty of water will increase the size of the flowers.

SEPARATE COLORS.—Giant Double White, Crimson, Canary Yellow, Golden Yellow, Purple Shades, Burnt Orange or Salmon Shades.
Pkt. 10c; 1/4-oz. 50c

DOUBLE GIANT SPECIAL MIXED.—Our own mixture, made up from separate shades so as to produce a blend of rare and rich colors.
Pkt. 15c; 1/4-oz. 75c

New Double Giant—"Novelties"

We offer two rich and rare colors that our grower has "rogued" and re-selected until almost true.

APRICOT YELLOW.—Flowers large and double; a distinct shade of yellow.
Pkt. 15c; 1/8-oz. 50c

SHRIMP PINK.—A true shade; very effective, attractive and rare. Pkt. 15c; 1/8-oz. 50c

Picotee Double Zinnia—New

A new, distinct and remarkable class, of large and beautiful double flowers; very effective, showy and novel, as the edges of the petals are all well marked or tipped with a distinct color, different than the body of the flower. Effective as bedders and excellent cut flowers.

PICOTTE DOUBLE MIXED.—Very choice,
Pkt. 15c; 1/8-oz. 50c

ELEGANS TALL DOUBLE MIXED.—A choice strain of medium-sized, double flowers (3½ feet).
Pkt. 10c; 1/4-oz. 35c



New Giant Dahlia-Flowered Zinnia
(One-half natural size)

Improved Dwarf Zinnia

Elegans Pumila.—This improved, large-flowered, dwarf, double Zinnia makes very effective plants for bedding or borders; plants 12 to 15 inches, compact and free-flowering; very desirable.

Bright Scarlet, Golden Yellow, White, Salmon, Rose or Mixed, all colors.

Pkt. 10c; 1/4-oz. 35c

VERBENA

One of the finest bedding plants and also suitable for borders, baskets and window boxes; its heads of brilliant-colored flowers produce one mass of bloom throughout the summer. Although classed as H. H. Perennials, they flower freely the first season from seeds sown early.

NEW GIANT.—The most beautiful and remarkable variety yet introduced.

Hybrida Giant Mixed. Pkt. 15c; 1/8-oz. 40c

MAMMOTH.—A carefully selected and improved strain. The trusses and individual flowers are of the largest size, of brilliant colors; free-blooming and of vigorous habit. Mammoth White, Scarlet, Rose-Pink or Mixed.
Pkt. 10c; 1/4-oz. 50c

FINE MIXED.—A choice mixture of large-flowering sorts.
Pkt. 5c; 1/4-oz. 40c

VIOLET

Viola Odorata is the well-known English Violet, a free-flowering, hardy perennial; easily grown from seed, though somewhat slow in germinating; succeeds best in partially shaded moist places.

ODORATA.—Blue or White. Pkt. 25c

WALLFLOWER

Very highly prized, old-fashioned plants, beautiful, fragrant, early spring flowers; half-hardy perennial varieties; 1½ feet.

Single Yellow, Dark Red or Finest Mixed.
Pkt. 10c; 1/8-oz. 25c

Double, Finest Mixed.—Fragrant; 3 feet.
Pkt. 15c; 1/8-oz. \$1.00

WILD CUCUMBER

(See Echinocystis, page 58.)

ZINNIA PLANTS.—Mixed Colors.—We will be able to supply in season well grown plants from our own select seed. ORDER EARLY and we'll send in PROPER SEASON. See page 79.

BEAUTIFUL ORNAMENTAL FERNS

A home, no matter how lavishly furnished, is not complete without decorative plants and palms. The bold, majestic palms and delicate, feathery foliage of the ferns lend a grandeur and magnificence that cannot be obtained in any other way.

READ THIS—Specimen Plants—These are large, choice, well-shaped plants, growing in pots, and are very beautiful. They cannot be mailed. We wrap and pack carefully and ship by express at your expense. Add 25c extra for packing, on all plants in pots less than \$1.50.

OSTRICH PLUME (See cut)—The fronds of this popular variety are the most delicate and plume-like. They are beautiful, full and fluffy, well-grown plants; are truly magnificent and last well in the house.

Choice plants, 25c to 35c, postpaid
Specimen plants in pots, \$1.25 to \$2.00
Extra large, \$2.50 to \$3.50

BOSTON FERN—One of the most beautiful and useful of house plants. It is of easy culture, and its sword-like fronds, in large specimens, attain a length of 3 to 4 feet, produced in a bewildering mass, arching, curving and interlacing in every conceivable direction.

Choice plants, 25c to 35c, postpaid
Specimen plants in pots, 75c to \$1.00
\$1.50 and up to \$5.00

ASPARAGUS SPRENGERI (Emerald Feather) (See cut No. 1)—This is undoubtedly one of the handsomest and most valuable evergreen trailing plants for the house and conservatory ever introduced. It is especially valuable for pots, vases, baskets, etc., covering all with its beautiful sprays of lovely green, feathery foliage; quite hardy and valuable for hanging baskets or porch boxes in summer if given partial shade and plenty of water.

Choice plants, 20c to 35c, postpaid
Specimen plants in pots, 35c to 75c
Extra large pots or baskets, \$1.50 to \$2.50

ASPARAGUS PLUMOSUS (Climbing Lace Fern) (See cut No. 3)—A finer and more delicate plant than the Sprengeri, but hardy and easily grown. Very satisfactory for window and house culture. An extremely graceful window climber, bright green, feathery foliage, as fine as the finest silk or lace.

Choice plants, 20c to 35c, postpaid
Specimen plants in pots, 35c to \$1.25

FILLED FERN DISHES

These are pretty, popular, fashionable and very desirable for centerpieces for the tea or dinner table or as ornamental plants on the sideboard or center tables.

A choice collection of plants growing in pretty Fern Fillers, \$3.25 to \$5.00. (See cut No. 2.)

These must go by express—not mailable.



Specimen plant, Ostrich Plume Fern, in a fancy jardiniere

MAIDEN HAIR FERN (*Adiantum Cuneatum*)—A very beautiful and graceful fern, with small, round leaflets.

Small plants, 25c, postpaid
Choice plants in pots, 50c to \$1.00 each

CHOICE TABLE FERNS

These handsome little ferns are used mostly in filling fern dishes. Your choice of the following. 25c each; 3 for 65c, postpaid

ASPIDIUM TSUSSIMENSE—Without question the most valuable of all ferns yet introduced for fern dishes; of strong but dwarf and graceful habit.

CRYPTOMIUM FALCATUM (The Holly-Leaved Fern)—One of the most desirable; very hardy and pretty.

PTERIS ARGYREA (Silver Fern)—A very showy fern, with variegated foliage.

PTERIS WILSONI—A very pretty and useful fern; green leaves with the ends very peculiarly crested; beautiful sort for fern dishes.

PTERIS CRETICA ALBO-LINEATA—A pretty and useful variegated variety distinctly showing the clear white variegation.



No. 1, Asparagus Sprengeri

No. 2, Filled Fern Dish

No. 3, Asparagus Plumosus

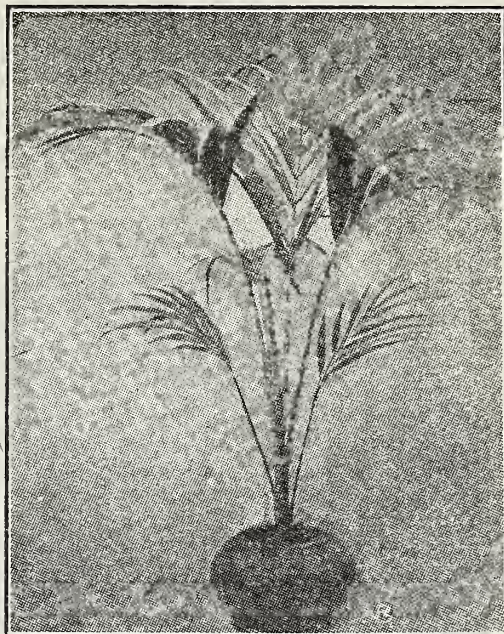
PALMS AND DECORATIVE POT PLANTS

Everyone knows how beautiful palms and decorative plants are, and how much they improve the parlor, hall or dining-room. We offer here only the best and most desirable kinds of easiest culture.

NOTE—Specimen plants or plants in pots cannot be mailed. See note top opposite page.

KENTIA

A beautiful, graceful, handsome looking, strong-growing palm, with deep green, crisp foliage; inclined to dwarf and spreading habit. One of the most popular for home culture, as they are very hardy, and stand the dry atmosphere. If we could have but one palm, it would be a Kentia. (See cut) Prices—Small plants \$1.00, postpaid. Choice plants in pots, 18 to 24 in., \$2.50-\$3.00. Specimen plants, \$5.00 to \$15.00.



Kentia Palm

ASPIDISTRA

Stately decorative house plant of hardy growth. The leaves grow quickly to a height of 18 inches or more. Will stand more gas, dust, cold and heat than any other palm we know of. (See cut.) Prices—Small plants (out of 4-in. pots) \$1.50, postpaid; by express (in pots) \$1.25 each. Small plants, postpaid, 75c to \$1.00.

RUBBER PLANT

(Ficus Elastica) (See cut)

This is certainly one of the best plants grown for decorative purposes. It succeeds well with ordinary treatment. Its glossy, thick, dark-green leaves are not affected by dust or gas. Prices—Small plants, postpaid, \$1.00. Choice plants in pots, not available, 15 to 18 in., \$1.50; 2 foot up, \$2.00 to \$5.00 and up.

COCOS PALM

(See cut No. 9.)—The most elegant and graceful of all the smaller plants. Its slender, erect stem is freely furnished with its graceful arching leaves of rich green color. Small plants are very desirable for centers in fern dishes.

Choice plants, about 10 inches high.

Each 75c, postpaid



Aspidistra



Rubber Plant

Cocos Palm

DRACENA INDIVISA

(Fountain Plant.)—This plant is unsurpassed for hardiness. Leaves graceful, long, narrow and pointed. Used extensively for centers in pots, boxes or urns with other plants. Perfectly hardy outside in summer.

Nice plants, 12 to 15 in., 40c to 60c, postpaid. Specimens in pots, 18 to 24 in. and up, 75c to \$1.50 and up to \$2.50.

Jardiniers
Fern Dishes
Fancy Vases Etc.

We stock a full line of standard, fancy and new styles Jardinieres, Flower and Bulb Pots, Japan Tubs, etc. See our stock before buying elsewhere.



Rex Begonia

REX BEGONIAS

Grown for the beauty of the foliage. The leaves are large, variegated and margined. Most varieties have a peculiar silver-metallic gloss. The most ornamental of window plants; also useful in vases, baskets and wardian cases. Prices—25c each; 3 sorts 65c.

CANARY BIRDS

Did you ever hear an imported Hartz Mountain Canary sing? They are the sweetest singers on earth. Call and see them. See page 150.

FLOWERING PLANT COLLECTIONS

On this and the two following pages we offer plant collections grown especially for our out-of-town customers. All orders for these plants are sent direct to the green house where they are gathered, packed and wrapped with special care so they will travel in safety by parcel post. Every plant is carefully labeled. Order any time; we'll send "in season."

1922 Collection—Twelve Grand Single Geraniums

Price 15c each; set of 12 varieties, \$1.50 postpaid

Alice of Vincennes.—Pure white, shaded to pink and bordered with bright scarlet. A splendid fancy geranium.

C. W. Ward.—Rich salmon, shaded to orange. Large trusses on strong stalks. Magnificent zoned foliage.

Eugene Sue.—A rare color; russet orange, yellow and salmon red.

Jacquerie.—Rich, vivid crimson; immense trusses. Excellent for bedding. Blooms freely; stands the sun well.

Mad. Chapotan.—Beautiful pink upper petals, marked with white; very pretty.

Madame Mosnay.—Peculiar shade of carmine lake, shaded to violet and white.

Maxine Kavolenski.—Odd shade of orange red, very distinctive; splendid bedder, vigorous, handsome; a dependable sort.

Mildred Rival.—Pure rose-pink, with conspicuous white blotch on two upper petals; flower beautifully formed, and the largest of its color.

Mrs. A. Blanc.—Silver salmon, shaded peach; glistening texture.

Mrs. E. G. Hill.—Very large trusses; color clear salmon, with a white center; one of the finest varieties.

Mrs. J. M. Garr.—Beautiful free-flowering white variety, as pure in color as driven snow. Always in bloom.

Nuit Poitevine.—Fine, large flowers; lower petals rich violet, bordered with scarlet, upper petals orange scarlet; very distinct.



Superb Collection Twelve Grand Double Geraniums

Price 15c each; set of 12 varieties, \$1.50 postpaid

Alphonse Ricard.—Rich, velvety scarlet, extra large and brilliant.

Dr. Phillips Tissie.—Bright scarlet, shaded to pure white in center; a fine, fancy sort.

Golden Dawn.—Rich orange scarlet, bordering upon shade of yellow. The nearest approach to yellow in geraniums.

Madame Barney.—Rich, deep shade of rose pink. Very bright and effective.

Madame Charrotte.—Rosy salmon, shaded and reticulated with white; very distinct.

Madame Landry.—Rich, bright apricot, shaded with orange; very large trusses. One of the best.

Madame Recamier.—Ivory white flowers in very large trusses. Strong, healthy grower.

Mrs. Lawrence.—Lovely satiny pink, shaded to white; its delicate color is delightful. A grand bedding variety.

S. A. Nutt.—The best of the rich, dark crimson varieties; very popular.

Scarlet Bedder.—Rich, bright scarlet; fine large trusses, borne in great freedom.

Thos. Meehan.—Rich, purplish rose color, upper petals marked with orange. A rare new color among geraniums.

Virginia.—Fine trusses of apple-blossom pink, shaded to white in center. Beautiful new sort.

Lady Washington Collection English Show Pelargoniums

These are commonly known as Lady Washington Geraniums. Like geraniums, they flower during the summer months and are very ornamental either as house or bedding plants.

Price 30c each; set of 6 sorts, \$1.50 postpaid

Bridegroom.—Small flowers in wonderful profusion all summer long; color pure white, upper petals heavily blotched with purplish maroon. Fine, healthy grower. Good house plant.

Duchess of Portland.—Lower petals vinous cerise, shaded with vermillion. Upper petals cerise, veined crimson, with two large maroon blotches.

Easter Greeting.—A new, free-blooming variety of the greatest merit. Flowers amaranth red, with a well-outlined maroon blotch on each petal. Blooms very large and in good-sized trusses.

Linda.—Bold flowers of clear salmon-pink, feathered maroon on upper petals. One of our finest sorts.

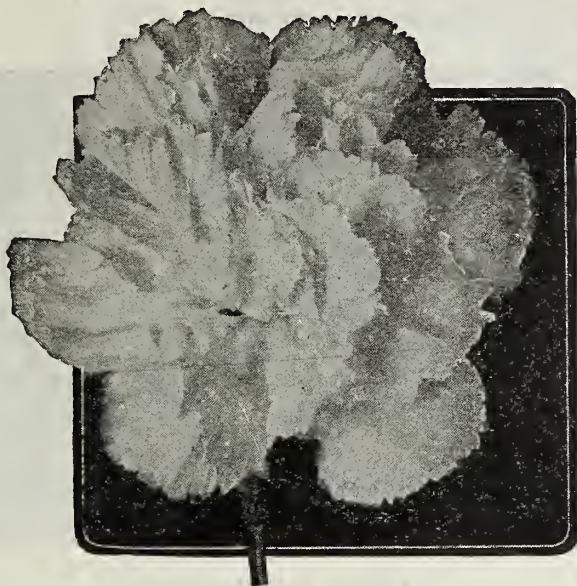
Lord Carrington.—Very large round flowers; crimson maroon, surrounded with purplish rose, large, white center. Very distinct.

Mabel.—Delicate light pink; upper petals feathered and blotched maroon. Elegantly fringed flowers of great substance.

USE "WONDER"—The best Fertilizer and plant food known. A teaspoonful to a plant does wonders. Descriptive pamphlets on request. See page 38.

CARNATION PLANTS

For beauty, fragrance and abundance of flowers, for its hardiness, easy culture and adaptability to outdoor or indoor cultivation, no plant excels the ever-blooming Carnation.



Aviator Collection Carnations

Price 20c each; 10 for \$1.50, postpaid

We have selected the varieties in this collection with much pride to ourselves, believing that we are giving to our patrons a set of Carnations which for general planting cannot be excelled. All have flowers of large size, strong and healthy growth and very free-blooming qualities.

Alice.—Delicate flesh pink; very sweet.

Aviator.—Rich, bright scarlet.

Bonora.—White, flaked with scarlet.

Beacon.—A brilliant, deep scarlet.

Enchantress.—A superb flesh pink.

Harlowarden.—Deep crimson maroon.

Mrs. A. Roper.—Bright rose color.

Mrs. C. W. Ward.—Bright, glistening pink.

White Enchantress.—A beautiful white.

White Wonder.—Glistening pure white.

LIBERTY COLLECTION GIANT JAPANESE CHRYSANTHEMUMS

Price 15c each; sets of 10 sorts, \$1.25 postpaid

Charles Raser.—Elegant snow-white incurved blooms of fine size and build. Comes on long, stout stems, grandly clothed with luxuriant foliage.

Chrysolora.—In our field trials during the past season this variety stood out pre-eminently as the finest yellow in the collection. Large, incurved flowers, of elegant form.

Chieftain.—A beautiful broad-petaled, incurving variety, round and ruffled. One of the prettiest forms.

Greystone.—Fine, large, incurved, broad-petaled blooms of a beautiful shade of chamois bronze. Very distinct new color and much admired.

Golden Eagle.—Large in size, perfect in form and a superb golden yellow in color.

Harvard.—Produces a good, medium-sized bloom of the darkest shade of crimson.

Liberty Bond.—Broad, incurved petals of heavy substance. Very large and perfect.

Mancato.—An enormous exhibition variety with perfectly double flowers. Color, rosy purple.

Tekonsha.—Very large, with broad, incurving petals of a rich terra-cotta color, shaded with bronze. One of the most striking sorts we have yet seen.

William Turner.—Pure white in color. It is enormous in diameter, deep in build and very perfect in form.



GLORY COLLECTION NEW ENGLISH GARDEN CHRYSANTHEMUMS

To those persons who have planted the late flowering sorts and failed to get them into bloom before frost, these new imported sorts will appeal. All will flower readily in the garden during September and October. Flowers not as large as the Japanese.

Price 15c each; full collection of 10 sorts, \$1.25 postpaid

Camille Bernadine.—Large, fluffy flowers of violet and carmine color, shaded with white.

Charles Gerard.—Gracefully formed flowers of a rich, bronzy yellow, overlaid with tawny-red. A beauty.

Countess of Cariel.—A very free-flowering sort of dwarf habit. Color, terra cotta and bronze. Rich and handsome.

Glory of Seven Oaks.—Deep golden yellow, very free flowering. Excellent dwarf habit.

Groachers Crimson.—Large, handsome flowers of a rich shade of crimson. Blooms very early.

Leslie.—Light canary yellow, covered with its pretty flowers early in the fall.

Mignon.—Rosy pink, shaded silvery. Strong, vigorous grower and very free.

Nina Blick.—Rich golden bronze, shaded to yellow. Dwarf, spreading habit and free flowering.

Normandie.—Delicate shell pink flowers of wax-like texture. Fine for cut flowers. One of the best of this type.

Queen of Whites.—Showy white flowers cover the plant early in the fall. A gem in the garden.

HARDY POMPON (Chrysanthemums)—See page 82

BEAUTIFUL FLOWERING BEGONIAS

Probably the most satisfactory class of plants for house culture obtainable. Of easiest possible culture. Their waxy flowers produced in much profusion, together with their handsome foliage, make them most desirable subjects for the window garden.

Price 20c each; full collection of 6 for \$1.00 postpaid

Bertha Chaterocher.—Covered all the year with bright scarlet flowers; handsome green foliage. A fine house plant.

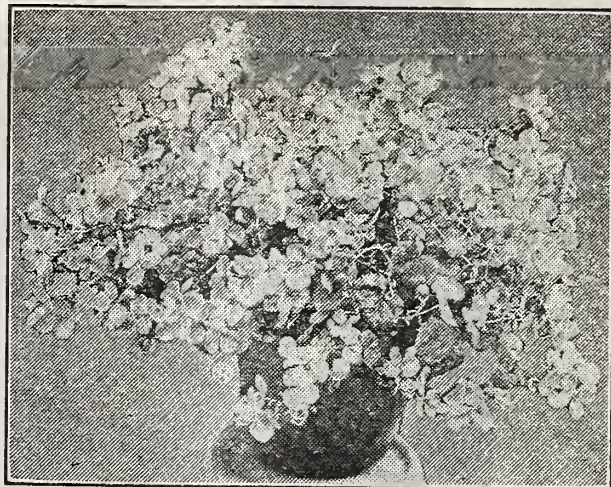
Dewdrop.—Pretty ovate shining green foliage; myriads of pure white flowers all the year; never out of bloom.

Foliosa.—The freest-flowering Begonia we have; makes a handsome window plant; pink flowers.

Gloire de Chatelaine.—Glossy green ovate leaves, flowers white, heavily bordered with rose pink. A grand new variety from France.

Marguerite.—Bronzy green, with purple cast; trusses of cream and rose-colored flowers.

Thurstoni.—Large bronze green leaves, purplish-red on reverse; rosy-white flowers in large panicles.



Gloire de Chatelaine

REX BEGONIAS.—See page 75.

BEAUTY COLLECTION CHOICE FUCHSIAS

This graceful class of plants make especially fine subjects for house culture as well as for planting in the garden. They are almost continuous bloomers and are very easily raised. The single varieties are the most floriferous, while the double sorts bear the larger flowers.

Price 15c each; collection set of 6 sorts, 75c



Fuchsia

Annie Earle.—Tube and sepals waxy white, corolla single, clear carmine; plant splendid and free blooming.

Dr. Brooks.—Rich, dark blue corolla, with crimson sepals. A beautiful single variety, never out of bloom.

General Roberts.—Flowers very large, corolla plum color, tube and sepals crimson; one of the finest double varieties.

Little Beauty.—A dwarf growing double variety, producing with great freedom small flowers of great beauty. Purple corolla with scarlet sepals. A little gem.

Storm King.—Superb double white variety; tube and sepals bright scarlet; corolla large, double and waxy white.

Speciosa.—A winter-blooming variety of large size; tube and sepals blush, corolla bright crimson.

DOUBLE FRINGED PETUNIAS

Double Petunias make excellent bedding plants as well as being suitable for window boxes and tubs. The flowers are quite double, nicely fringed, about three inches in diameter and are produced freely all through the summer months. We offer a set of six choice varieties.

Price 25c each; collection of 6 sorts for \$1.25

Ceres.—Lovely mellow-rose color; flowers finely fringed.

Dotty.—Beautifully variegated white and mauve pink.

Harold.—Pure white blotched with purple; petals heavily lacinated.

Snowball.—A beautiful pure white sort with finely fringed petals.

Undine.—Large self-colored flowers; color reddish purple. Very rich and handsome.

Venosa.—Pure white with blue suffusions and purple veins.

TENDER TRAILING AND CLIMBING PLANTS

Cinnamon Vine.—A beautiful vine of rapid growth, suitable for porches, trellises, etc.; pretty white flowers of cinnamon-like fragrance. One of the very best quick-growing vines. Large roots, each 20c, 2 for 35c

Maderia Vine.—A fine, rapid growing vine producing an abundance of dense green foliage; succeeds in any location; good for rockeries, trellises and verandas.

Each 20c, 2 for 35c

Lantana Delicatissima.—The Weeping Lantana; lilac-pink flowers all season; fine basket plant.

Each 20c, 3 for 50c

Mesembryanthemum Spectabilis.—Quilled shaped, succulent leaves with large single thistle-like cerise pink flowers; fine for baskets, vases or porch boxes as well as a good bedding plant; flowers continuously.

Each 20c, 3 for 50c

Smilax.—Well known climber for house culture.

Each 20c, 3 for 50c

Tradescantia (Wandering Jew).—Good vase and basket vine. Two sorts, green leaved and pink variegated.

Each 20c, 3 for 50c

For Hardy Climbing Vines and Trailers see Pages 98, 104, 105.

PRICE LIST OF ANNUAL BEDDING PLANTS



During April, May and June we have thousands of flowering and ornamental annual plants. Write for 100 prices, naming kind and size wanted.

BY MAIL.—If you add 3c each or 30c per dozen we will prepay charges on above plants excepting those from pots (3 inches or over), which cannot be mailed safely and must go by express, you to pay transportation charges. NO PLANTS SENT C. O. D.

For description see Flower Seed Department of this catalog

Agerantum—	Doz.	Lobelia—	Each.	Doz.
Blue or mixed.....3 for .25	.60	Compacta or Trailing.....3 for .20	.20	.50
Alyssum—		Marigolds—		
Sweet .....3 for .20	.50	African—Double mixed.		
Anthrrium (Snapdragon)		French—Double, Tall or Dwarf,		
Mixed .....3 for .30	1.00	mixed .....3 for .20	.20	.50
Aster—		Pansy—	Doz.	
Giant Crego, white, pink, purple or mixed .....3 for .20	.50	Choice plants, blooming age, postpaid ..... .60 to .75		
Candytuft—		12 in a basket, Steel's Mastodone in full bloom, by express only (charges collect) 1.00 to 1.50		
Mixed or white .....3 for .20	.50	Petunias— (See collections, p. 78)		
Carnation—			Each	Doz.
Named varieties (see page 77)		Single Ruffled Giants in mixed colors only..... .10	.10	.75
Chrysanthemum—		Single, pink, white or purple .20	.20	2.00
Named varieties (see page 77)		From 3-inch pots..... .25	.25	2.50
Cosmos—	Each.	Phlox—		
Single—Red, pink, white or mixed ..... .10	.75	Annuals mixed ..... .10	.10	.60
Double Crested—New—Mixed.. .15	1.25	Single, hardy perennial (See page 84)		
Cobea Scandens—		Salvia (Scarlet Sage).—		
From 2-inch pots..... .20	2.00	Splendens, tall ..... .10	.10	.75
From 3-inch pots ..... .25	2.50	Zurich, a Fireball, new dwarf.. .10	.10	1.00
Coleus—		3-inch pots ..... .20	.20	2.00
Choice colors, 2-inch pots..... .20	2.00	Stocks—		
Choice colors, 3-inch pots..... .25	2.50	Fine mixed colors.....3 for .20	.20	.75
Dracena Palm (Fountain Plant)		Verbena—		
(See catalog sizes, page 75)		Fine mixed.....3 for .20	.20	.75
Geraniums— (See collections p. 76 for named kinds. Single or double varieties in scarlet, salmon pink, light pink or white or Ivy Leaved trailing.		From 2-inch pots ..... .15	.15	1.50
From 3-inch pots..... .20	2.00	Vinca—		
From 4-inch pots..... .25	2.50	Variegated, from small pots.... .15	.15	1.50
From 4-inch extra select plants in full bloom..... .30	3.00	Variegated, from large pots.... .25	.25	2.50
Pelegonium (Lady Washington)		Zinnias—		
(See collections, page 76.)		Giant and Dwarf Mixed....3 for .25	.25	.75
German Ivy— (For baskets and boxes.)		Giant—Separate colors....3 for .25	.25	1.00
2-inch pots..... .15	1.50	New Dahlia Flowered—Mixed.. .10	.10	1.25
Heliotrope— (See page 80)		Plant Tubs or Japanese Kegs		
Blue ..... .10	1.00	Filled with large flowering plants and vines for porch or garden display 3.00 to 5.00		
Blue, 3-inch pots..... .20	2.00	Hanging Baskets		
Blue, 4-inch pots..... .25	2.50	Filled with large flowering plants and vines. (Cannot be shipped safely) 2.00 to 3.50		

REMEMBER, we are not offering you little seedling plants, pulled from the seed beds. Our plants are strong, healthy, transplanted plants from flats or pots, raised from our HIGHEST QUALITY SEED or propagating plants of SUPERIOR MERIT.

LANTANAS—Beautiful Flowering Plants

These pretty annual flowering plants will appeal to every lover of flowers. Their pretty, showy, dainty flowers come freely from early spring until late fall. They withstand the hottest sun and dry weather. Plants quite bushy, 10 to 12 inches high and of clean, neat foliage. Try them once and see how delightful they are. We offer 5 very choice varieties.

Your choice 20c each; collection 5 sorts, 85c postpaid

Leo Dex.—Flowers crimson-violet and bronze.

Jaun d'Or.—Sulphur-yellow and pink.

Iolande.—Crimson, orange and yellow.

Courbeille d'Argent.—Everblooming white.

Ameil.—Red and orange-yellow.

SWEET SCENTED HELIOTROPES

Price 15c each; four sorts for 50c postpaid

Heliotropes are universal favorites on account of their delightful fragrance and flowering equally as well as bedding plants in the summer, or as pot plants in the house during the winter.

ALBATROSS.—New variety of great merit; large panicles of pure white flowers in great profusion all season.

HEAVENLY BLUE.—Light blue flowers, with white eye. Grows vigorously and flowers abundantly; very fine for bedding out, for which purpose we offer it at \$1.00 per dozen.

LAVENDER QUEEN.—Beautiful shade of lavender, suffused with rosy mauve. A dwarf, robust grower and very free and continuous bloomer.

ROYAL PURPLE.—Deep violet purple with white eye; very floriferous, and cannot be too highly recommended for bedding out, for which purpose we offer it at \$1.00 per dozen.

PRIMROSE GIANT OBCONICA

This is the freest flowering pot plant, blooming throughout the entire season, often having from 15 to 20 sprays of large lavender flowers on stems 10 to 15 inches high at one time, lasting in bloom fully four weeks without fading, continually sending new sprays all over the plant, making it one of the most desirable plants for the house ever introduced. Prices, 25c each; extra large plants, 40c to 50c each, postpaid. Large plants in full bloom, October to May; by express only; each \$1.00 to \$1.50.

CALLA LILIES

The Calla is one of the best winter flowering plants for room culture, needing little care beyond abundant water and an occasional washing of the leaves to keep them free from dust. Plant 1 bulb in a 6-inch pot. As soon as it starts growing bring to the light and heat and the result will be most satisfactory.

WHITE CALLA—The most extensively grown; bulbs in season from September to May.

Choice bulbs, 20c; large 25c

Extra large 35c; 3 for \$1.00

NEW GODFREY—Plant is more dwarf in growth; flowers lily white, very graceful and produced in astonishing numbers; come into flower quicker; will also do well in the garden for summer flowers.

Each 30c; 3 for 75c

YELLOW ELLITIANA—This new Yellow Calla is of marvelous beauty; flowers are large, rich, dark golden yellow, often 4 to 5 inches across the mouth; leaves are beautifully spotted with white. Bulbs in stock from November to May. (See cut.)

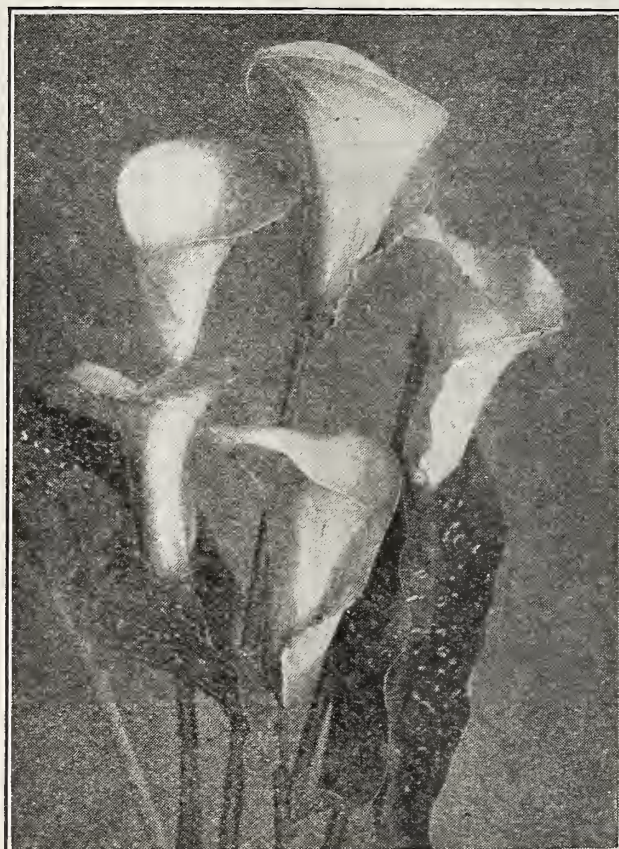
Select bulbs, each 35c; 3 for \$1.00

TUBE ROSES

A very desirable and most easily grown summer flowering bulb. Easily recognized by its exquisite fragrance and beautiful spikes of white flowers, which are borne on long stems, making it an admirable cut flower for house decoration. If started in pots and then transplanted to open ground, can be had much earlier. For flowering in the open border, plant in the spring after the ground becomes warm.

EXCELSIOR DWARF PEARL—

Select bulbs, each 10c; doz., \$1.00



Yellow Calla Lily

AMARYLLIS

These hardy flowering bulbs are very popular for pot culture and garden. Their giant, Lily-like flowers produced on tall stems are exceedingly rich and lasting. For pot culture, 1 bulb to a 6-inch pot. In the garden, plant 1 foot apart and cover bulb about 4 inches.

BELLA DONNA.—One of the most satisfactory, bearing on long stems clusters of 8 to 10 superb, large, beautiful pink, Lily-like flowers with a delightful fragrance. A fine fall bloomer.

Each 35c

REMEMBER—Our fall catalog of Flowering Bulbs, Hyacinths, Tulips, etc., ready September 1 each season. Free on request.

BEAUTIFUL HARDY LILIES

These are the most fragrant, beautiful and stately of all flowers produced from bulbs; they require very little care. Do not disturb them oftener than every three to five years. Plant about six to twelve inches deep, according to size of bulb, and if the ground is not well drained use plenty of sand around the bulb, and lay it on its side. Plant in clusters or groups of six or more for best effect. They increase in size and beauty each year.

AURATUM—The gold-banded lily of Japan. Immense flowers, borne in great clusters; color, rich, creamy white, thickly spotted with crimson and brown, each petal having a golden yellow band through the center. (See cut.) Each 35c; doz. \$3.50

SPECIOSUM ALBUM—Pure white flowers with a greenish band through the center of each petal. They are of great substance and very fragrant. Hardy and sure to bloom. Each 40c; doz. \$4.00

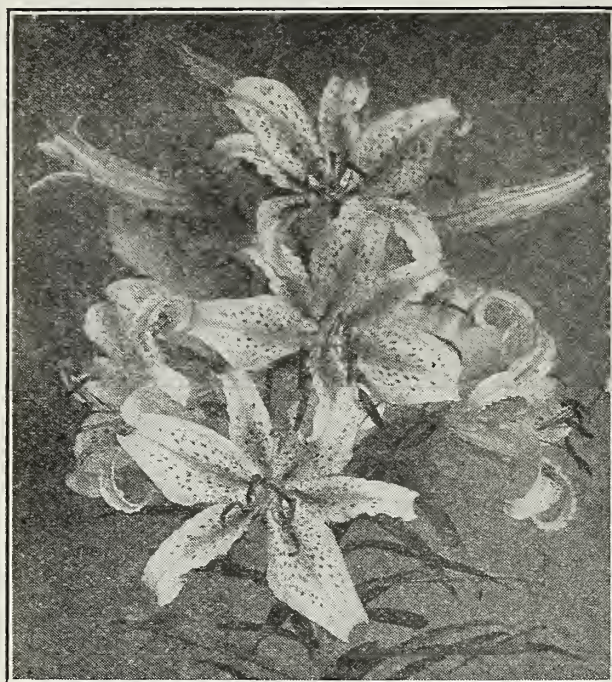
SPECIOSUM RUBRUM (Roseum)—The blush pink petals are thickly dotted with rose or crimson spots. This hardy, strong growing sort is sometimes called "Crimson Branded" and is considered by many the most satisfactory for garden cultivation. Each 35c; doz. \$3.50

TIGRINUM FLORA PLENA—The double-flowered Tiger Lily. Bright orange colored flowers. Each 30c; doz. \$3.00

TIGRINUM SPLENDENS (Improved Single Tiger Lily)—Has very large flowers of excellent form, color orange-salmon, with dark spots; hardy and a free bloomer. Each 25c; doz. \$2.50

LILIUM WASHINGTONIANUM (Mt. Hood Lily)—A beautiful Lily, native of Oregon; flower of open trumpet form; white, tinted with lavender pink; grows 3 to 5 feet high; the beautiful, fragrant flowers are freely produced in graceful clusters. Few lilies surpass it and it deserves to be planted much more extensively. Our bulbs are gathered in the foothills of Mt. Hood and grown one year in nursery rows. This makes them firmer, bloom more freely and sure to live.

Each 25c; 3 for 60c; extra large bulbs 35c; 3 for \$1.00



Lily Auratum

LILIUM CANDIDUM (St. Joseph or Madonna Lily)—This is the ever popular, fragrant, snow white, hardy garden Lily. The large, trumpet-shaped flowers are produced in clusters at the top of 4 to 5-foot stems; blooms in the open ground in June. A very hardy and popular Lily. Planted in beds or among shrubbery it makes a stately, majestic display.

Mammoth Bulbs: Each 40c
Large: Each 30c; doz. \$3.00

Easter Lily

Pure pearly white, deliciously fragrant, and a remarkable profusion of bloom characterize this charming and celebrated Easter Lily. Without exception, it is one of the most valuable bulbs for winter flowering in the house. It is a magnificent variety for church decoration at Easter, and tens of thousands are grown for this purpose alone. Our bulbs are the best obtainable. Popular flowering size. Each 35c; 3 for \$1.00

Extra large bulbs 40c

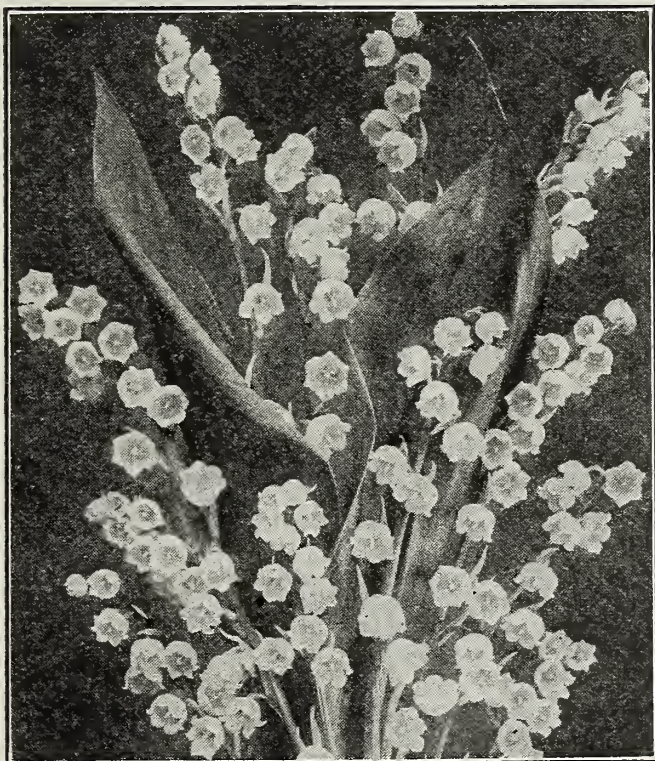
LILY OF THE VALLEY

One of the most charming spring flowering plants, producing in profusion its delicate bell-shaped, delightfully fragrant white flowers. Valleys thrive in any common soil, and will do well in shady situations, where few other plants will succeed. Highly prized for cutting purposes, and exceedingly well adapted for flowering in pots in the winter. Plant 6 pips to a 6-inch pot.

They are perfectly hardy and most charming planted in beds or borders around the lawn, where they can remain, increase and bloom from year to year.

IMPORTED PIPS, for forcing indoors or planting outside. Note.—First stock arrives in December.

4 for 25c; doz. 75c; 100 \$5.00



Note—Give lily bulbs good, rich ground, well drained. Put a small stake by each bulb when planted so the sprout will not be broken in cultivation.

HARDY PERENNIAL FLOWERING PLANTS

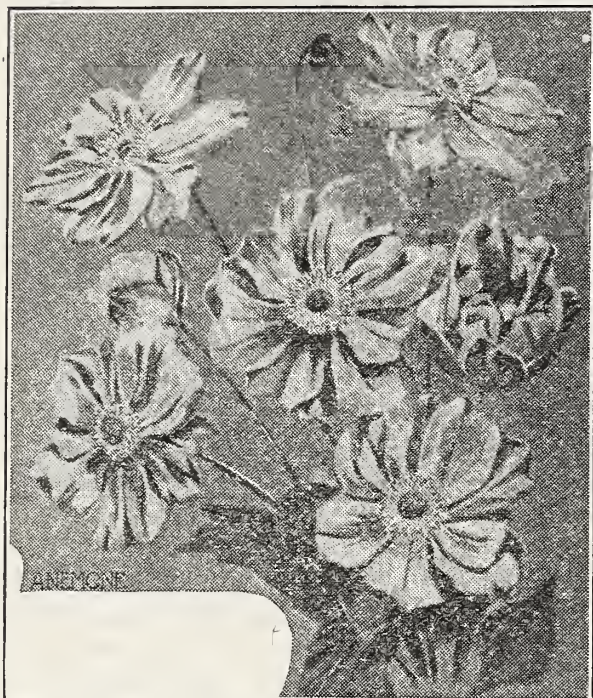
No class of plants enjoy greater popularity at the present time than the Hardy Perennials. They have made rapid strides into public favor the past few years, until now they may be considered to have a prominent and a permanent place in our American gardens. Once planted, they require very little care, increasing in size of plant and profusion of bloom from year to year. Most varieties can be taken up, divided and reset every third year.

LARGE STOCKS—LOW PRICES—We are in a position to supply unlimited quantities at special prices and you will find our plants are strong and well rooted. Our prices must not be compared to Eastern lists, for our plants are all hardy, field grown, worth double the average stock sold. Limited space will not permit us to list all varieties we can supply.

Ask for any special varieties wanted

PRICES.—All prices postpaid—10 times the each price is dozen price

Express, freight and call orders 25c less in dozen lots



Anemone

Anemone

JAPANESE—These beautiful Windflowers are one of the most important hardy plants. They begin blooming early in August and continue in full beauty until cut down by hard frost. Excellent for bouquets, lasting for days when cut; 2½ to 3 feet.

Each 30c; collection of 3 kinds 75c

Whirlwind—Best large pure white.

Alice—Lovely flowers, beautiful pink.

Prince Henry—Red; large, free flowering.

Alyssum

Gold Dust (Saxatile Compactum)—Large heads of golden yellow flowers in May and June; silvery foliage; fine for rockeries; 10 to 12 inches. Each 25c; 3 for 60c

Arabis

Rock Cress—One of the most desirable of the very early spring flowering plants for edging and the rock garden. Forms a dense carpet, completely covered with pure white double flowers; 6 inches. Each 20c

Asters—Hardy

Michaelmas Daisies.—Popular free flowering, late bloomers. Fine for cutting. Lavender and blue flowers; 3 to 4 feet.

Each 25c; doz. \$2.50

Aquilegias

The Columbines are one of the most elegant and beautiful of hardy plants, producing their graceful spurred flowers on stems rising two feet or more above the beautifully divided foliage, and are highly prized for cutting; June to September.

Mixed—Very choice. Each 30c; 3 for 75c

Bellis Perennis

English Daisy—Popular early flowering plants. Very pretty for small borders.

Double Red or White, Each 20c; doz. \$2.00

Mammoth—Extra large flowers in white or pink only. Each 25c; doz. \$2.50

Coreopsis

Lanceolata Grandiflora—Popular hardy plants. The flowers are a rich golden yellow, of graceful form and invaluable for cutting; the main crop comes during the latter part of June, but it continues in bloom the entire summer and autumn; it succeeds everywhere; 1½ feet

Each 25c; 3 for 65c

Cantebury Bells

(Campanulas—or Bellflowers)

One of the most popular hardy garden plants on account of the beautiful clusters of long-stemmed, dainty yet large flowers. They are very showy. The "Calycanthemum" are only "biennials."

PERSICIFOLA (Peach Bells)—Large clusters of drooping bell-shaped flowers during June and July; 3 feet.

Blue or White. Each 25c; doz. \$2.50

CALYCANTHEMA (Cup and Saucer Canterbury Bells)—A beautiful form of this favorite flower. (See cut.)

Blue, Rose or White. Each 25c; doz. \$2.50

Chrysanthemums

They produce a lavish profusion of blooms after most flowers are gone; very popular.

Hardy Pompom—Small ball-shaped flowers. We offer four colors. Field-grown plants. Yellow, red, pink or white.

Each 25c; 4 for 85c

BEAUTY COLLECTION POMPONS

Ten new named varieties, each distinct and beautiful. (Young plants in season from March to July). Full collection \$1.50, postpaid

Doronicum

One of the most effective and very early spring flowering perennials, growing about 2 feet high, producing a profusion of Marguerite-like golden yellow flowers of much beauty and elegance. It is a splendid flower for cutting. Each 25c; doz. \$2.50

Dianthus

Deltoides (Maiden Pink)—A charming creeping variety, with medium-sized pink flowers in June and July; especially suited for the rock garden or borders. Each 25c

Hardy Garden.—Mixed. Each 25c; doz. \$2.50

PRICES.—Ten times the each price will be the dozen price. All prices postpaid.

HARDY PERENNIAL FLOWERING PLANTS—Continued

NOTE.—25c plants are \$2.50 doz.; 30c, \$3.00 doz. See note top page 82

Delphinium

(Hardy Larkspur)

These are deservedly one of the most popular subjects in the hardy border, bold, attractive and highly prepossessing plants of easiest culture; perfectly hardy; 4 to 6 feet. Fine for cut flowers, June to November; when the first blooms are faded, cut all foliage close to the ground and a second crop will come. (See cut.)

Choice Mixed, all shades.

Each 25c; doz. \$2.50

Gold Medal Hybrids—Unquestionably the finest strain of hybrids from the best named varieties. Very large flowers in mostly light, beautiful shades.

Each 30c; doz. \$3.00

Moerheimi—A new and continuous bloomer; pure white; 5 feet tall.

Each 75c

Belladonna—A free and continuous bloomer; flowers clear turquoise blue; very beautiful; long flower spikes.

Each 35c

Formosum—Dark blue, white centers; an old favorite; 3 to 4 feet high.

Each 30c



Dicentra—Bleeding Heart

Dicentra

(Bleeding Heart)

An old-fashioned favorite; its long racemes of graceful heart-shaped pink flowers are always attractive. Perfectly at home in any part of the hardy border, and especially valuable for planting in the shade.

Small Roots 50c; Large 60c and 75c

Digitalis

(Foxglove)

Old-fashioned, hardy, desirable plants with broad foliage and showy flowers borne on spikes. June and July; 4 to 6 feet.

Mixed colors. Each 25c

Forget-Me-Not

(Myosotis)

Palustris—A variety that is hardly ever out of flower; useful in a shady spot in the border.

Each 25c; doz. \$2.50

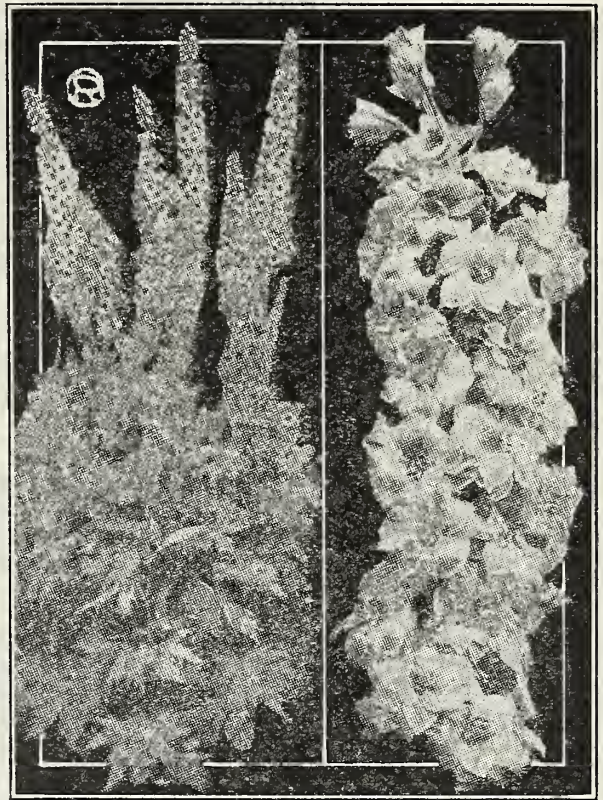
Gaillardia

(Blanket Flower)

Among the showiest and most effective of perennial plants, blooming continually from early summer on through the season. Grows 2 feet high. Flowers about 3 inches across, dark red in center with rings of crimson and vermillion encircling same on a golden yellow ground.

Grandiflora. Each 30c; 3 for 75c

FOR BEST RESULTS, plant these hardy perennials in the fall or early in the spring before new growth gets too far advanced.



Delphinium (Plant and Flower Spine)

Geum

A showy border plant, growing about 18 inches high and producing all summer and fall brilliant double scarlet flowers in large clusters. This new variety is a fine advance from the older sorts heretofore grown. We consider this the finest red hardy plant.

Mrs. Bradshaw, Double.

Each 30c; 3 for 75c

Heidreichi, Single.

Each 25c; 3 for 70c

Gypsophila

(Baby's Breath)

Fine, delicate foliage. Minute white flowers borne in enormous quantity in open panicles during summer months. Be sure and have a few plants of this for cutting, as it works up beautifully in bouquets of other flowers; 3 to 4 feet.

Paniculata.

Each 25c to 35c

Heuchera

Sanguinea (Coral Bells).—A compact bushy plant of robust constitution and easy culture, bearing during July and August graceful sprays of coral-red flowers in great profusion. Fine for cutting.

Each 25c; doz. \$2.50

Hemerocallis

Day Lily—Three feet; May and June. Flowers clear, full, yellow or orange; very fragrant; fine for cutting.

Flava—Lemon yellow.

Each 30c

Fulva—Orange.

Each 30c

Hollyhocks

Single or Double, in separate or mixed colors.

Each 25c; doz. \$2.50

Hypericum

(St. John's Word)

Moserianum (Gold Flower)—Of drooping, training nature. Fine for rockeries, etc. Free flowering. Rich golden-yellow; June to frost.

Each 25c; clumps 50c to 75c

HARDY PERENNIAL FLOWERING PLANTS—Continued

NOTE.—25c plants are \$2.50 doz.; 30c, \$3.00 doz. See note top page 82

Phlox

Among the hardy perennial plants no class is of more importance than the Phlox, succeeding in almost any soil and position, and flowering through a long season. Excellent for cutting and decorating or for mass effects. Keeps well in winter.

Standard Collection

A choice collection of standard varieties. Our selection. Each 25c; 12 sorts, \$2.50

Novelty Collection

New, rare and rich; flowers of largest and best types; very choice.

Your choice, each 30c; 1 plant of each variety (8), \$2.25, postpaid.

Asia—One of the most valuable recent introductions, a delicate shade of mauve, with a crimson carmine eye. Very free blooming.

Europa—A white variety with very decided crimson carmine eye; the individual flowers as well as the trusses are very large, entirely distinct.

Frau Anton Buchner—The finest white variety yet introduced, having the largest truss and individual flower; of dwarf habit.

General Von Heutsze—Immense trusses of very large flowers; color, the most brilliant salmon red imaginable. Simply grand.

Le Mahdi—Immense panicles of deep velvety purple flowers. Very rich and striking.

Rynstrom—An improved form of the popular variety Pantheon; fine for massing, of a Paul Neyron Rose color.

Sir Edward Landseer—Rich bright crimson flowers in large panicles; 3 feet high. A rare and beautiful variety.

Thor—Lovely shade of salmon-pink, suffused and overlaid with scarlet, large white halo and aniline red eye. One of our finest sorts.

Creeping Phlox

Subulata (Moss Pink)—An early spring-flowering type with pretty moss-like evergreen foliage, which during flowering season is hidden under a mass of pretty blossoms. Excellent for bordering, rockery and grave planting. Each 25c; 3 for 65c

Alba—Pure white flowers Each 25c

Lilacina—Pretty lilac. Each 25c

Poppy

Nudicaule (Iceland Poppy)—A beautiful class of hardy poppies. Flower stems about a foot in height, bearing elegant cup-shaped flowers, ranging in color from white to scarlet, but most valuable in the yellow and orange shades. Valuable for cut flowers, lasting well when cut.

Mixed All Colors, each 25c; doz. \$2.50

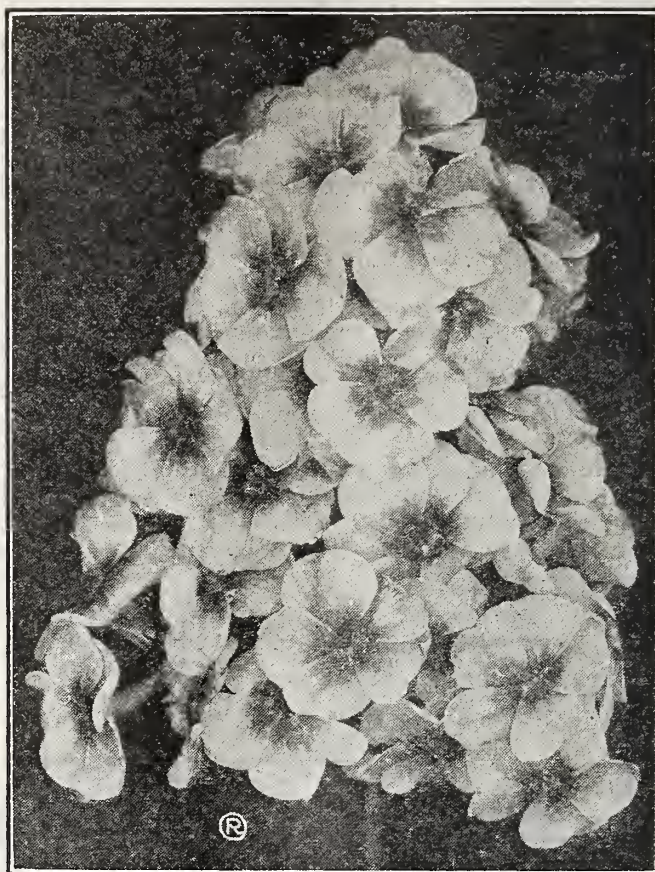
ORIENTAL POPPIES

Fine subjects for massing or planting singly in the hardy garden; 3 feet. We offer some new kinds recently brought from England. Set of 3 sorts 80c

Salmon Queen—Clear, beautiful salmon-pink, elegant flower of fine size. Each 35c

Perry's White—Large, pure white flowers of satiny texture; large crimson blotch at base of each petal. A rare variety. Each 35c

Orientalis—Very large flowers; bright red with a black blotch at base of each petal. Each 25c; doz. \$2.50



Phlox Decussata

Primroses Primula

English Primrose—Pretty low growing plants bearing large numbers of beautiful flowers very early in the spring and having the old-fashioned cowslip fragrance so dear to the heart of every Englishman. The flowers are in a wide range of rich colors from golden-yellow to deep crimson maroon.

Mixed Hybrids—Each 25c; 3 for 65c

Vulgaris—Canary yellow, very early, fragrant. Each 25c

Pyrethrum

Persian Daisy—One of the most valuable of our early summer flowers; charming shades of color, and wonderful lasting properties as a cut flower; they flower in May and June and frequently in August and September the second time; the colors run into almost every shade, which makes them foremost of plants in this particular season.

Hybridum—Mixed colors.

Each 25c; 3 for 65c

Pentstemon

BEARD TONGUE—For description see flower seeds, page 64. Plants, each 25c

“WONDER” DID IT

Tillamook, Ore., Feb. 14, 1921.

Routledge Seed & Floral Co.

Dear Sirs: I have a beautiful lawn grown from your Evergreen Lawn Grass Seed. Others who made lawns here and bought their seeds in packages at the stores produced nothing. Their lawns were full of weeds and a failure. It pays to buy your “Highest Quality” seeds.

I am, respectfully,

MRS. FLORENCE STILLWELL.

FEED YOUR PLANTS.—You must supply “feed,” in other words, fertilizer, if you want the best results. Read about “Wonder” and “C-M,” pages 38-39.

PRICES.—All prices postpaid—10 times the each price is dozen price. Express, freight and call orders 25c less in dozen lots.

Lavender

Vera.—The true, sweet fragrant lavender. Flower stems always in demand.
Small plants 25c; large plants, 35c to 50c each

Rudbeckia

(Golden Glow)

Indispensable for the hardy border; grow and thrive anywhere, giving a wealth of bloom, which are well suited for cutting.

Flowers beautiful golden-yellow; very double. Marvelous continuity of bloom from June till late fall; 6 to 8 feet.

Small plants 25c; large 35c

Saxifragas

Umbrosa (London Pride).—A low-growing, spreading sort, throwing up slender stems a foot high of pretty pink flowers in dainty clusters; small, dark evergreen leaves. A fine border for banks or rockeries.

Each 20c; doz. \$2.00

Megasea.—Very hardy and ornamental; leaves broad, round, deep green; 1 foot. Pretty flowers; very early. Each 25c; doz. \$2.50

Shasta Daisy

Very large daisy-like flowers, often measuring 4 to 5 inches across, having three or more rows of petals of the purest white. Flowers produced in great profusion on long strong stems. Very popular; 2 to 3 feet.

Each, small 20c, \$2.00 doz.; large 25c
Clumps 40c to 50c



Shasta Daisy

Scabiosa

Caucasica.—A choice hardy plant, thriving in any situation and producing fine umbels of beautiful lavender-colored flowers all season through; flowers very lasting, admirably adapted for cut flower purposes; grows 18 inches high. One of the finest perennials.

Each 25c; 3 for 65c

Stokesia

Cornflower Aster (Cyana).—Handsome lavender-blue cornflower-like blossoms which measure from 4 to 5 inches across. Desirable as a single plant or grown in beds 18 to 24 inches high, June to September.

Each 30c

Sweet Williams

One of the fine old-fashioned hardy plants which has of late years been greatly improved in form and habit. Produces splendid effects when massed in beds or interspersed with other plants and shrubs. They grow about eighteen inches high and are at their best during June and July. Each 25c

Tritoma

(The Everblooming Flame Flower)

Pfitzerii.—Blooms from August to October, with spikes 3 to 4 feet high, and heads of bloom of a rich orange-scarlet, producing a grand effect either planted singly in the border or in masses. Each 30c

Valeriana

Garden Heliotrope.—Decorative plant for the rockery, with strong heliotrope odor.

Coccinea Rubra.—Rose-pink flowers; blooms in May; 2 feet high. Each 25c

Veronica

Rupestris.—A fine rock plant, growing 3 or 4 inches high, thickly matted deep green foliage, hidden in spring under a cloud of bright blue flowers. Each 30c

Vinca

Myrtle (Minor).—An excellent dwarf evergreen trailing plant used extensively for carpeting ground under trees and on graves; small dark green leaves. Each 25c; doz. \$2.50

Violets

Of all the delightful perfumes, that of the Sweet Violet is the most delicate and pleasing, and places this modest flower among our greatest favorites. They commence to bloom as soon as the cold weather comes in the fall and flower even more profusely in the spring.

Price, 20c each; collection \$1.00

Alaska.—Hardy and robust and producing in spring great masses of enormous double flowers of a deep blue-black color and powerful fragrance.

Lady Hume Campbell.—Large double flowers of a beautiful light-blue color; very free blooming.

California.—Very showy and beautiful flowers; enormous size, deep violet-blue and extremely fragrant.

Princess of Wales.—Flowers single, of gigantic size; color, a very rich shade of blue.

Peacock.—This is a charming variety and pleases everyone. It has lovely flowers of white, shaded with light blue.

Swanley White.—The finest and best double white violet in cultivation.

Wall Flower

Double English.—A fine old hardy garden plant seen in every English garden. Grows about 18 inches high and produces early in the spring, rich colored spikes of bloom in various shades of yellow and brownish red.

Yellow or Red.

Each 30c

Mixed.

Each 25c; 3 for 60c

Yucca—See Page 102

FOR BEST RESULTS, plant these hardy perennials in the fall or early in the spring before new growth gets too far advanced.

ROUTLEDGE SUPERB GLADIOLUS BULBS

Plant 4 to 6 inches deep and as close as 6 inches in beds or borders, or among the roses or shrubs. Planted at intervals from very early spring until July 1, they will give a profusion of flowers until the first frosts. **ALL PRICES POSTPAID.**

Superb 1922 Collection

Ten Very Choice and New Varieties

Special—1 each (value \$1.90) for \$1.50; 3 each, \$4.25, postpaid.

FIRE KING.—Intense fiery scarlet, wonderful color and a grand flower.

Each 15c; doz. \$1.50

IDA VAN.—Flaming orange-pink, very rich and brilliant.

Each 15c; doz. \$1.50

LIEBESFEUER.—Beautiful brilliant scarlet, very choice. A prize winner.

Each 20c; doz. \$2.00

L'IMMACULER.—A grand pure white extra long spike and many flowers open at a time.

Each 20c; doz. \$2.00

MARY FENNELL (Kundred).—Light lavender, lower petals pencilled with primrose; rare color.

Each 25c; doz. \$2.50

MARECHAL LE FOCH.—Beautiful rich rose, extra long spikes full of open flowers; a strong, stately grower.

Each 25c; doz. \$2.50

PRINCE OF WALES.—Lovely shade of salmon-pink and coral; handsome, large flowers early.

Each 20c; doz. \$2.00

WHITE GIANT.—Largest pure white with light Iris-blue throat; splendid ruffled petals.

Each 25c; doz. \$2.50

YELLOW HAMMER.—Golden-yellow shaded orange, large open flowers on graceful spike.

Each 15c; doz. \$1.50

BARON HULOT.—Rich indigo-blue, graceful spikes; a rare, unique and attractive color.

Each 10c; doz. \$1.00

Gold Medal Collection

Every variety is a wonder in size, form and color. Very popular with florists.

SPECIAL.—3 bulbs each (9 kinds), \$2.50, postpaid.

AMERICA.—Well known, popular sort, producing large spikes of wide-open flowers of a beautiful soft flesh-pink.

3 for 25c; doz. 75c; 100 \$5.00

HALLEY.—Large, clear coral, enhanced by pale yellow in the throat; graceful spikes. Very popular for cutting.

3 for 25c; doz. 75c; 100 \$5.00

MRS. FRANCIS KING.—Very large, open flowers of great merit light scarlet or flame color

3 for 25c; doz. 75c; 100 \$5.00

MRS. FRANK PENDLETON.—Tender pink with a crimson velvet blotch on lower petals; flowers of elegant form and very beautiful; nothing finer.

Each 15c 3 for 40c; doz. \$1.50; 100 \$10.00

MRS. WATTS.—A beautiful clear wine-red. A most pleasing shade.

Each 15c; doz. \$1.50; 100 \$10.00



Mrs. Frank Pendleton

NIAGARA.—A delightful cream shade, blending to canary yellow, throat splashed with carmine; enormous blooms.

Each 15c; 3 for 40c; doz. \$1.50; 100 \$10.00

PEACE.—Massive, strong growing, stately white, with lilac feathering in throat; late.

Each 15c; 3 for 40c; doz. \$1.50; 100 \$10.00

PANAMA (Improved America).—Soft, deep pink, brilliant silver-frosted effect; beautiful at night.

Each 15c; 3 for 40c; doz. \$1.25; 100 \$8.00

SCHWABEN.—Magnificent, clear creamy yellow, brilliant carmine throat, wax-like flowers; most charming.

Each 15c; 3 for 40c; doz. \$1.25; 100 \$8.00

HIGHEST QUALITY BULBS.—Remember, the Gladiolus Bulbs we offer are REAL "TOP" SIZE, healthy, vigorous and free of disease, Western grown and WORTH DOUBLE most Eastern, imported or mail order stock.

GLADIOLUS — Continued

MIXED GLADIOLUS BULBS

GOLD MEDAL MIXTURE.—This mixture is composed of all large and up-to-date varieties and our customers can depend upon having a large and magnificent variety of beautiful colors. Strictly first-size bulbs.

3 for 25c; doz. 85c; 100 \$5.00

CHOICE MIXED.—This mixture will produce a large variety of beautiful large flowers at a little expense; unequaled for the price. First size bulbs. Doz. 75c; 100 \$4.00

PRIMULINUS HYBRIDS.—A new South African strain; slender, graceful sprays of delicate, somewhat drooping but elegantly poised flowers; very novel and excellent for vases; rare, rich colors, mostly in shades of yellow, orange and pink. Very distinct.

3 for 25c; doz. 85c

POPULAR MIXED.—A mighty good mixture of popular kinds.

Each 5c; doz. 50c; 100 \$3.50

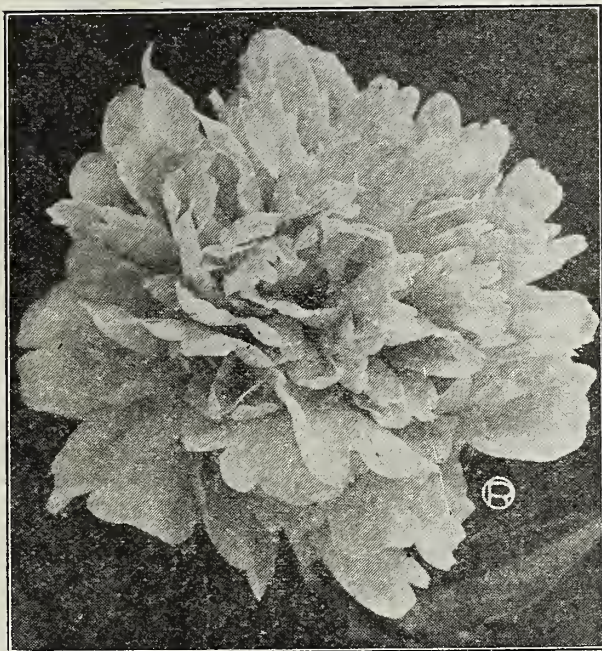
HOLLAND BULBS.—Our complete Bulb Catalog for Fall of 1922 ready for mailing about September 1. Write if you would like copy.

CHOICE HERBACEOUS PAEONIES

Fine, hardy plants, rivaling the Rose in perfection of bloom, color and fragrance. They are at home in any climate or soil, but thrive best in deep, rich, well drained loam. They make a gorgeous display. The Paeony is perfectly hardy. Plant in the fall or early spring and do not cover the crown of the roots over 2 or 3 inches.

Our collection of varieties is unsurpassed. Every one is a beauty of sterling merit. We send out strong roots for quick results.

PRICE: Postpaid—SPECIAL—full set of 12 fine sorts, \$6.25



Paeony Festiva Maxima

Achilles.—Immense globe-shaped flowers of light Enchantress pink. Heavy, stout grower and good bloomer. Each 50c

Andre Lauries.—Dense, globular blooms of largest size; color dark tyrian rose, shaded to solferino red; a fine, strong grower, flowering very late in the season. One of our best varieties. Each 50c

Delicatissima.—A fine-shaped bloom of most perfect outline and exquisitely fragrant; color, clear rose-pink, shaded to silver. A splendid bloomer. Each 50c

Duchess of Orleans.—Fine, large flower, long stem, healthy grower, profuse bloomer; color, light flesh pink, with creamy yellow center. Rarely beautiful. Each 50c

Edouard Andre.—Large, massive flowers of a deep rich crimson color. Mid-season variety of great merit. Each 75c

Festiva Maxiam.—This is not only the finest white in existence, but in most quarters is regarded as the queen of all the Paeonies; it combines enormous size with wondrous beauty, often 7 to 8 inches in diameter; color, snowy-white, flecked with an occasional clear purple spot on edge of center petals; in addition it is very fragrant; a glorious flower, impossible to describe; magnificent.

Each 60c

Floral Treasure.—Very large and full, clear pink, shading lighter at center; a splendid hemisphere of fragrance; long, strong stems to uphold the big blooms, sometimes 6 inches across; very vigorous and floriferous.

Each 75c

Golden Harvest.—Beautiful mingling of white, cream, gold and pink; strongly fragrant. A splendid free-blooming variety of the highest degree of merit. Each 60c

Lady Lenora Bramwell.—A grand, mid-season sort, with large, massive, silver-pink flowers, borne on stout stems clothed with heavy green foliage. The most fragrant of all Paeonies. One of the finest sorts extant.

Each 75c

L'Esperance.—Very double; fine shaped bloom; perfect in outline; exquisitely fragrant; color clear, fine, bright pink. Each 50c

Mad. de Verneville.—Pure white, with edges of some petals bordered carmine, early, free and exceptionally fine. One of the very finest white Paeonies. There were 65 large, perfect blooms counted on one plant last June.

Each 60c

Queen Victoria.—Large, full, compact bloom; opens flesh white, changing to pure white, center petals tipped with carmine spots; a grand white Paeony for any purpose. More of this is being planted for cut flowers than any other variety because of its lasting qualities when cut. The flowers can be kept six weeks in a cold storage room and still be fresh looking. Each 50c

NOTE—CUTTING PEONIES.—Cut the flowers in bud when half open and let them open in water. Keep from sunlight. Don't cut all the stems off or you will injure next season's crop.

CANNAS

Everyone knows the value and beauty of Cannas for bedding. Their large, massive, tropical looking leaves and magnificent flowers cannot be equaled in any other plant of such easy culture. Plant outside after danger of frosts is past, 18 inches apart, in rich, deeply dug, well-prepared bed (12 plants required for a 6-foot circular bed). Plant the taller kinds in the center.

While there are many varieties of Cannas, we offer only the "very select"; they can be depended upon to be the most showy and desirable, with giant flowers, elegant foliage and especially adapted to Western conditions.

PLANTS IN SEASON AT OUR STORE—(after danger of frost). Plants give quicker and better results than dormant roots.

Our 1922 Collection New Cannas

Prices, 30c each; \$3.00 per dozen postpaid;
set of 8 sorts, \$2.00

City of Portland.—Beautiful glowing pink, deep and brilliant; magnificent growth, attaining height of 3½ feet; immense spikes of bloom. The finest pink Canna to date. Produced by the foremost Canna specialist and named after our city.

Firebird.—Flowers in immense trusses well above the foliage on tall stalks; petals of great breadth and substance, forming a magnificent flower; color, clear brilliant scarlet without streaks, spots or blotches; grows five feet high. A wonderful variety.

Golden Gate.—Immense wide open florets of pure golden yellow, richly rayed with orange-crimson and apricot; throat deep carmine mammoth spikes of bloom on stalks four feet high. A rare and beautiful new sort.

Jane Adams.—Immense heads of flowers of a rich buttercup-yellow—a solid color throughout; leathery dark green leaves. A wonderful Canna.

Juanita.—A grand new bronze-leaved Canna growing to over four feet high and producing fine trusses of finely formed flowers; color bronzy-orange and chrome-yellow. A wealth of color for bedding purposes.

Rosea Gigantea.—Deep, rich, dark pink, shaded to coral; immense spikes of bloom in great freedom; 4 feet.

The President.—Fiery orange-scarlet flowers of immense size in large spikes of bloom; 3 feet.



Canna Plant Well Grown

Wintzer's Colossal.—Immense bright scarlet flowers on massive footstalks. The largest flowered Canna yet produced; persistent and prolific bloomer; 4 feet.

King Humbert Collection of Cannas

Prices, 25c each; \$2.50 per dozen postpaid; set of 12 sorts, \$2.50

David Harum.—Foliage dark, glossy bronze and plum; great bloomer; flowers orange-scarlet, spotted vermilion; 4 feet.

Egandale.—Bronzy red foliage surmounted by fine spikes of currant-red flowers of great brilliancy. One of the best.

Gladioflora.—Orange pink with dashes of golden yellow on each petal; distinct yellow, throat mottled with pink. Beautiful; 3 feet.

Gladiator.—Golden yellow netted and spotted with orange scarlet. A popular bedder. Very handsome; 4 feet.

Hungaria.—Immense spikes of bloom of a beautiful light pink color; fine leathery leaves of massive proportions. A glorious bedding variety; 3½ feet.

Indiana.—Giant flowers of soft orange, lightened by flecks of gold, penciled and slightly margined with deep rose; 4 feet.

J. D. Eisele.—Bright vermilion scarlet, overlaid with orange; large spikes of bloom well above the handsome green foliage. A fine bedding sort; 3½ to 4 feet.

King Humbert.—Immense spikes of bloom of a bright orange scarlet streaked with crimson; magnificent bronzy-green leaves with brownish-green stripes; large, bold and effective; 5 feet.

Louisiana.—Beautiful and showy; green leaves edged bronze, strong and healthy; very fine bloomer. The mammoth flowers are of fine form and a vivid scarlet; 5 feet.

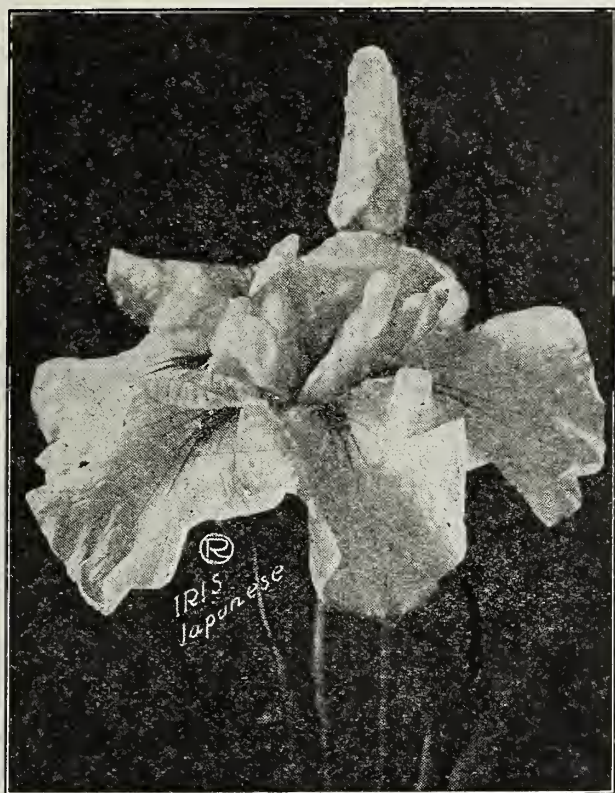
Niagara.—Grows 3 feet high; large green foliage; flowers very large, deep, rich crimson, widely bordered with golden yellow.

Queen Helena (Yellow King Humbert).—Immense spikes of golden yellow flowers spotted in throat with scarlet; massive green foliage. A grand variety; 4 feet.

Queen Charlotte.—A bright orange scarlet, deeply edged with bright canary-yellow. The plant is of dwarf habit, with flowers from June to October.

CANNA BEDS.—Set plants 18 to 24 inches apart; 12 plants will make a six-foot bed. Circle them with Salvia, then edge with Lobelia (see Bedding Plants, page 79), and you will have a wonderful effect.

NOTE.—A sack or two of "C-M" in the Canna Bed will do wonders towards making elegant growth and magnificent flowers. See page 39.



Japan Iris

JAPAN IRIS KAEMPFERI

The Japanese Iris is quite distinct from all others, and never fails to excite the admiration of all who see it. It is becoming more popular each year. The enormous flowers produced in June and July display a marvelous blending of rich and rare shades. They like a rich soil and plenty of water when in bud and flower. Doubles have six petals, singles three.

Exhibition Collection

Seven wonderful varieties of rare and rich colors. Each 35c. Full collection \$2.25, postpaid. Any sort, by the dozen, \$3.50, postpaid.

Kumo-isho.—Vinous, purple margined gray, yellow blotches surrounded with velvety crimson halo, radiating into the petals in feathers and penciling; 6 petals.

Kuro-kumo.—Beautiful deep purple throughout; 6 petals.

Osho-kun.—Intense tyrian-blue, yellow blotches radiating into white, petaloid stigma dark violet; 6 petals.

Oyodo.—Immense violet-blue petals and very large standards, petaloid stigmas dark violet; 3 petals.

Senjo-no-hora.—(Angels' Den.) Vinous purple, splashed gray primrose blotches radiating out into sky-blue; 6 petals.

Shigano-ura-nami.—Red-lavender, white halo, large petals, feathered and penciled with yellow; 6 petals.

Shira-taki.—(White Waterfall.) Giant white feathered primrose, a grand and graceful flower; 6 petals.

MONTBRETIAS

Beautiful—Graceful—Rare. Try 'em

Quite rare and not generally known. Allied to the Sparaxis and Gladiolus. Perfectly hardy here, but should be given protection or removed where winters are severe.

They are very beautiful, bright and showy

summer and fall-flowering bulbs. Flowers star or violet-shaped and are freely produced along the tall, slender, graceful stems. Height 18 to 24 inches. Flowers come in delightful shades of brilliant scarlet, orange-red, creamy-white, golden-yellow, etc. We offer a mixture of the choicest sorts.

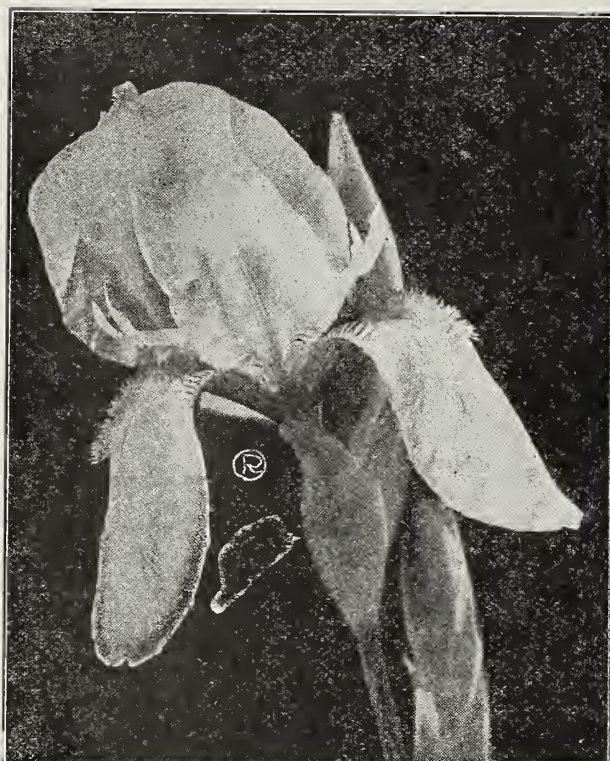
Elegans Mixed. 3 for 40c; doz. \$1.00; 100, \$6

TUBEROUS BEGONIAS

A grand class of bulbs, blooming continually throughout the summer, the flowers often being over 4 to 5 inches in diameter and rival in color the most brilliant Geranium flower. As a bedding plant out doors, or for pot culture in the house, these Begonias cannot fail to give satisfaction if given well-drained soil and partially shaded situation.

Single Mixed. 35c each; \$3.00 doz.

Double Mixed. 40c each; \$4.00 doz.



Fleur de Lis—Liberty Iris

LIBERTY IRIS—FLEUR-DE-LIS

These are among the most desirable and easiest grown of our spring flowering hardy plants, producing in May and June their showy flowers of exquisite coloring, combining the richest and most delicate tints. They thrive everywhere and are always in bloom by Decoration Day.

Prize Collection

New and distinct varieties of great beauty and handsome, large flowers.

Each 30c; 3 for 75c; full prize collection, (8), \$1.85; per doz. assorted or straight, \$2.25.

Caprice.—Beautiful shade of rosy red.

Crimson King.—Rich claret and purple.

Flavescens.—Large, fragrant, soft yellow.

Florentina.—Most popular early white.

Gypsy Queen.—Old gold, falls maroon.

Pallida Dalmatica.—Large pure lavender.

Prince Victor.—Beautiful blue, falls violet.

Queen of May.—Rosy-lavender, almost pink.

LIBERTY IRIS IN MIXTURE.—Many fine varieties. Per doz. \$1.50; per 100 \$10.00.

Plant more Iris; they increase in size and beauty each year. Divide the roots in the fall every third or fourth year and reset. Use "C-M" and "Wonder"; see pp. 38-39.

ROUTLEDGE SEED AND FLORAL CO'S

NEW AND POPULAR DAHLIAS



GEISHA

We have probably grown and tested out more varieties of Dahlias than any other company in the Northwest, and have come to the conclusion that it is only confusing and needless to offer hundreds of varieties. So many are almost the same; many are very inferior. We believe the varieties on this and the following pages will please the most critical. All are priced very reasonable and are post-paid. Field grown roots only.

DELIVERY.—We generally hold all early orders for Dahlia Bulbs until about March 1. Planting season is from April to July 1.

PAEONY FLOWERED DAHLIAS

One of the most popular classes of Dahlias. The form and style of the flowers vary greatly; some have flat petals, others are pointed and twisted in most fantastic style. All are beautiful and produced in profusion on long, slender stems; fine for cutting.

ANDREW CARNEGIE.—Beautiful salmon-shaded bronze-pink; flowers of fine size, borne freely on long, straight stems.

Each 35c

ANNA DOPPENBERG.—Grand novelty from Holland; large flowers of splendid form on strong, erect stems; color, pure sulphur-yellow. One of the finest Dahlias ever introduced.

Each 60c

BARON DE GRANCY.—Large, fluffy, pure white flowers, rising on long, slender stems far above the foliage. A gem for cutting.

Each 35c

FREDA NEWMAN.—Bright orange-bronze, margined with old gold; fine, long, stout stems. Admirable for cutting.

Each 35c

GEISHA.—The showiest and most attractive of this type yet produced; giant blooms of fantastic shape with broad petals curiously twisted and curled, forming a flower entirely original; color, bright golden-yellow, suffused and marked with Indian red; harmonious and very striking.

Each 75c

GERMANIA.—Fine large velvety wine-red flowers beautifully suffused with golden yellow towards the center.

Each 35c

HI GILL.—Magnificent blooms of a rich golden-yellow, shaded with deep rosy copper; flowers massive, produced on very long, stout stems with a great freedom. One of the finest varieties in any class of Dahlias.

Each 75c

KING OF AUTUMN.—Buff-yellow shaded with orange and terra cotta; unique in color and wonderful in growth, a veritable giant among Dahlias. A fine Holland novelty.

Each 75c

MADAME VON BYSTEIN.—Holland variety with beautiful lavender-colored flowers; of large size and excellent form on fine, long stems.

Each 35c

MONSHELBE.—Giant flower with broad, twisting petals of a rich golden-yellow color; fine, sturdy grower and free bloomer; undoubtedly the finest sort of the color in this section of Dahlias.

Each 50c

OREGON BEAUTY.—Fiery scarlet with golden shadings; large, handsome flowers on long stems; wonderfully free in bloom.

Each 35c

POLAR STAR.—Snowy-white flowers in great profusion; stout stems. Fine for cutting.

Each 50c

P. W. JANSEN.—Color, orange cerise shaded yellow; heavy, wide petals, nicely arranged; flowers large and freely produced on stout, long stems.

Each 40c

PHENOMENE.—Rich, creamy pink flowers on long stems; finely formed and very free flowering. A splendid sort.

Each 35c

VAN DYKE.—Lovely salmon, rose-tinted heliotrope; of immense size, of distinct twisted form; fine, long, stout stems. A grand exhibition variety.

Each 60c

YELLOW KING.—Flowers of colossal size on stout upright stems; color, golden-yellow tinted with bronze. A fine new Dahlia of the hybrid class, hailing from Holland. One of our finest.

Each 60c

CHOICE NEW CACTUS DAHLIAS

Of the various types of Dahlias those of the well-known Cactus form are undoubtedly the most important and best liked. There is a great diversity in the forms of the various sorts, but in the main they are characterized by the long, narrow, twisted and pointed petals of the flowers. Most of the fine petaled sorts are products of English hybridists who have worked wonders with them the last few years. Distinct from the English types are the new Hybrid Cactus sorts, most of which are coming from specialists in Holland. The following fine novelties are undoubtedly the very acme of perfection in Dahlia growing.

WHITE

ALABASTER.—Blooms of large size, just sufficiently incurved in form to show to advantage when exhibited; flowers of the purest white. Each 75c

THE SWAN.—Snow white flowers of most approved cactus form borne on stout, stiff stems. Each 50c

SNOWDON.—Pure white Cactus Dahlia, having all the requisites of a good garden sort. Sturdy growing, free-blooming, long, stiff stems, finest form and good size. Each 40c

FRANCES WHITE.—Flowers of fine size and depth; narrow petals curling and twisting in corkscrew fashion; color, pure snow white. Each 35c

SCHWAN.—A fine pure white, of large size, perfect form and great substance, lasting well when cut. Each 25c

PINK

SIR DOUGLAS HAIG.—Narrow tubular petals incurving and twisting irregularly, forming an ideal flower; color, a lovely combination of pink shades; entirely distinct from existing varieties; good stems. Each 75c

MISS LONDON.—Finely formed flowers with tubular incurved petals nicely pointed; color, deep rose pink; tips of petals tinted yellow. Each 30c

SENTINEL.—Huge flowers on good stems; color, rose-pink with a prominent white disc at center of bloom. Grand exhibition variety. Each 50c

YELLOW—ORANGE

CAMBRIAN.—Clear salmon, lightening to yellow at tips of petals; flowers irregularly incurved with hooked petals of great substance; habit of growth ideal; flowering stem good. Each 50c

EDITH CARTER.—Flowers golden-yellow, heavily tipped with rosy-carmine; of splendid cactus form, with erect-growing habit. Each 40c

FALCON.—Long stems perfectly rigid holding large flower of finest Cactus type and form; color, bright yellow, shaded to reddish bronze at tips of petals. A charming and distinct variety. Each 50c

GOLDEN EAGLE.—Bright yellow, with suffusion of rose and fawn, which deepens toward the tips; perfect habit, with strong, erect stems. Each 35c

HIBERNIA.—Bright primrose yellow, outer petals shaded with bronze; neat incurved form and an ideal habit of growth. A capital variety for any purpose. Each 50c

MELODY.—Very distinct, greatly admired; flowers of fine size and form, with great depth of bloom and petals twisted and curled in exquisite manner; center of flower bright golden-yellow, while the outer half of bloom is pure white. Each 50c

NERTHUS.—Center rich bronze-yellow, passing to carmine-rose tips. Each 30c



Falcon

SCARLET—CRIMSON

F. W. FELLOWS.—This variety produces huge flowers with surprising freedom; of true Cactus form, with narrow curling petals; color, bright orange-scarlet throughout. Each 50c

HARBOR LIGHT.—Orange-scarlet; one of the finest for cut flowers; dwarf habit, free bloomer, with large, perfect flowers on long, stiff stems. Each 35c

HERBERT RABY.—A giant among Cactus Dahlias, the flowers being of mammoth size and held upon fine, erect, wiry stems; color, rich purplish crimson throughout. One of the finest dark colored sorts to date. Each 50c

JOHN RIDING.—Sturdy growing, free-blooming, long stout stems carrying immense flowers of the richest crimson. Each 50c

KALIF.—A majestic flower of exhibition size, often over 9 inches in diameter; of perfect Cactus form, carried on strong, stiff stems well above the foliage; color, bright scarlet. Each 50c

PATRIOT.—Glorious bright scarlet flowers of most perfect Cactus forms, produced in great profusion; fine stout stems. Admirable for cutting and a fine decorative garden variety. Each 75c

RHEINISCHER FROHSINN.—Distinct and refined flowers of the largest size and of splendid form. The long, incurving petals are white at their base, changing to a luminous carmine-rose color towards their ends. Each 40c

W. E. PETERS.—Deep scarlet crimson flowers of the largest exhibition size; long, pointed petals are beautifully arranged, forming a magnificent incurved bloom; every flower comes perfect. Each 50c

WODAN.—Bold and large, frequently seven inches in diameter; a graceful arrangement of semi-incurved tubular petals of a pleasing, delicate salmon-rose color, shading to old gold in the center. Each 50c

DECORATIVE DAHLIAS

In this class of Dahlias will be found those sorts which florists and gardeners prize most highly for cut flowers. At recent Dahlia shows in Portland the sorts from this class have drawn much attention and are being widely called for. These Dahlias are characterized by their strong, erect growth and their very large, loosely formed flowers on strong, stiff stems far above the foliage.

Price, Field Grown Roots, 30c each; 4 for \$1.00 (except where noted)

BORELL VAN HOOGELANDEN.—Inner petals golden-yellow bordered and reversed with terra cotta; outer petals bronze and terra cotta. Large flower of great refinement. Superb variety. **Each 50c**

BESSIE BOSTON.—Rich, bright scarlet of fine size. Petals cleft deeply.

DELICE.—Pure bright rose pink; large flower, broad petals. Beautiful form.

DIANA.—Grand Holland novelty with very large, crimson-maroon flowers of finest form. Long, stout stems. A noble sort. **Each 50c**

EUGENE TEELE.—Deep scarlet; fine form; very long, stout stems. A gem for cutting.

GARIBALDI.—Very large, full flower on good stem. Rich bright scarlet. Very attractive. One of the best from Holland. **Each 40c**

GLORY OF LEIDEN.—Rich crimson scarlet of velvety texture. Center deep maroon. Petals very wide and recurving. Grand for cutting. **Each 50c**

GEORGE WALTERS.—Superb new sort; giant flowers on long stems. Color rich golden-bronze, shaded with salmon. **Each 75c**

HOCHSAI.—Yellow, overlaid with bright scarlet. Very large, held erect on long stems. Holland novelty. **Each 50c**

HORTLANUS FIET.—Colossal flower of delicate shrimp-pink, the tip of each petal touched with gold. **Each 50c**

JACK ROSE.—Brilliant crimson-red, rich and glowing, similar in shade to the popular "Jack" Rose, which suggested its name.

KAISERINE AUGUSTA VICTORIA.—Large, snowy-white flowers in great profusion, borne on stout stems.



Decorative Dahlia—Delice

VESUVIUS.—Orange-scarlet of the most brilliant shade. Large flowers on straight stems. Produced in the greatest profusion. Fine for cutting. **Each 50c**

WILLMORE'S MASTERPIECE.—Honey yellow, overlaid with golden-rose or tango color. Superb, large flowers. **Each 40c**

MINA BURGLE.—A giant in growth and bloom. Immense deep, scarlet flowers of finest cut-flower grade, with long, stout stems holding flowers erect and possessing remarkable keeping qualities when cut.

MRS. WINTERS.—Very large, superb, waxy white flowers on stately and erect stems.

PRIDE OF CALIFORNIA.—Bright scarlet flowers of gigantic size. Strictly an exhibition variety. Lasts fine when cut. **Each 75c**

SHOW OR QUILLED DAHLIAS

In this section we have the Dahlias of our grandmother's garden, with their richly colored flowers of rounded form and quilled petals. Some are delightfully edged and splashed with contrasting colors, and all are as beautiful as it is possible to imagine for garden decoration.

Field Grown Roots, 25c each; set of 12 sorts, \$2.50 postpaid

AMERICAN BEAUTY.—A hybrid show Dahlia, with flowers of immense size, produced on long, heavy stems well above the foliage. Color gorgeous wine-crimson, of velvety appearance.

ARABELLA.—Yellow ground, tipped and shaded with pink, an unusual combination of colors. A beautiful variety.

BON MAZA.—White ground, streaked and marbled in a curious manner with bright red.

CHARLES LANIER.—Very large and full. Golden-yellow, edged amber. A strong, vigorous grower, producing its large flowers absolutely full to the center.

A. L. CHASE.—Creamy-white, streaked with purple, sometimes solid purple.

DOROTHY PEACOCK.—Flowers freely produced, of fine size and elegant rounded form. Color lively rose-pink, which appeals to everyone. **Each 50c**

FIREBALL.—Large, perfect flowers, with quilled petals. Color rich, bright scarlet.

MAUD ADAMS.—An ideal show Dahlia of luxuriant growth, producing its perfectly formed flowers on nice straight stems well above the foliage. Color pure white, overlaid with a light pink suffusion. **Each 50c**

LADY MILD MAY.—Pure white, shaded to delicate lavender. Very large and full. Superb.

ROBERT BROOMFIELD.—A good, pure-white, double flower. Very free.

STORM KING.—Luxuriant growing, free-blooming; this variety is perhaps the most popular white show Dahlia. Flowers snowy-white.

QUEEN OF YELLOWS.—Bright golden yellow, petals quilled and flowers as round as a ball.

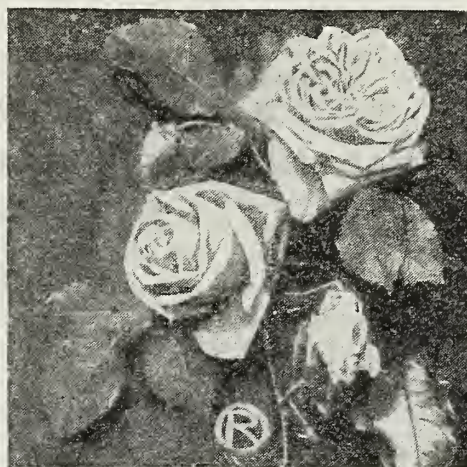
Choice Rose Plants

**For Spring and Early Summer Planting Only
and NOT for Fall Delivery**

On this page we are offering four choice collections. This is the popular mail-order size that we send by mail prepaid. They are grown in 3-inch pots, are strong, healthy and well rooted and from 10 to 12 inches high. To be planted outside in the warm spring or early summer months.

These will produce many blooms the first season, and you will be surprised at the results you can obtain, and at quite a saving in prices. Water well and use "C. M." and "Wonder."

NOTE.—Order any time convenient and we will forward "in season." **NO ORDER FILLED FOR LESS THAN TWO PLANTS.**



Columbia Collection of New Roses

Price, 50c each; set of 6 sorts, \$2.75

Lady Hillingdon.—Deep apricot yellow, long pointed bud, a fine forcing or garden rose, excellent for cutting.

Hoosier Beauty.—Glowing crimson-scarlet with maroon shadings; beautiful buds on long stems; wonderfully free in bloom. A valuable new American rose.

Columbia.—Elegant shaped buds and flowers of a rich rose-pink color. Is making a fine record about Portland.

Ophelia.—Salmon, flesh, shaded rose, base of petals apricot yellow; fine shaped flowers; excellent habit.

Sunburst.—Without doubt the finest yellow rose in existence; large buds and flowers of an orange copper color, shaded golden-yellow; superb.

Rose Marie.—Beautiful shade of light pink with silvery suffusion; finely formed buds; very free and vigorous.

Richmond Collection Choice Roses

Price, 40c each; set of 12 sorts, \$4.00 postpaid

Franz Deegan.—Bright golden yellow flowers on fine stems.

J. B. Clark.—Rich crimson shaded maroon; very large and fine.

Killarney.—Deep shell pink, beautiful long buds.

Radiance.—Rich, bright cerise; handsome foliage and sweet scented.

White Killarney.—Most beautiful ever-blooming white rose in existence.

General McArthur.—Grand crimson scarlet. One of the finest.

Mad. Abel Chatenay.—Salmon pink, shaded darker. Always in bloom.

Mad. Caroline Testout.—The famous Portland rose; large, bold, bright pink flowers.

Maman Cochet.—Beautiful rosy pink; long pointed buds.

Richmond.—Crimson-scarlet buds. A beautiful free flowering variety.

Souv. de President Carnot.—Shell-pink and fawn.

White Maman Cochet.—Pure white; elegant buds.

Beauty Collection Everblooming Roses

Price, 35c each; set of 10 sorts, \$3.00 postpaid

American Beauty.—Large rosy-crimson flowers; sweet-scented.

Dean Hole.—Bright carmine with silvery shadings.

Kaiserine Augusta Victoria.—Large pure white; very free and constant.

Lady Ashtown.—Silvery pink, shaded yellow; fine, large bloom.

Lady Battersea.—Bright cherry crimson, long pointed buds.

La France.—Silvery pink, large and very sweet-scented.

Papa Gontier.—Cherry red, shaded yellow. Grand bedder.

Virginia R. Coxe (Gruss an Teplitz).—Fiery scarlet.

Viscountess Folkstone.—Delicate flesh pink; full and handsome.

Royal Collection Hardy Roses

Price, 35c each; set of 12 sorts, \$3.50 postpaid

Anna de Diesbach.—Beautiful clear carmine pink.

Baron de Bonstettin.—Dark, rich red; very large.

Clio.—Massive, light-pink flowers.

Conrad F. Meyer.—Beautiful silvery pink.

General Jacqueminot.—Bright crimson.

Glorie Lyonnaise.—Chamois yellow; full, sweet, distinct.

Margaret Dickson.—Ivory white, shaded flesh.

Mrs. R. G. J. Crawford.—Silvery pink; fine form.

Mrs. John Laing.—Soft, delicate pink; free flowering.

Paul Neyron.—Large, deep rose; double and handsome.

Prince Camille de Rohan.—The best dark maroon.

Ulrich Brunner.—Rich, glowing crimson; large.

RAMBLER OR CLIMBERS, 1 YEAR OLD, ONE-HALF 2-YEAR-OLD PRICES. See PAGE 98

PLEASE REMEMBER we cannot afford to pack and wrap a single Rose Plant; no order filled for less than two plants on this page unless you order other plants.

CHOICE OREGON - GROWN ROSE BUSHES

We make a specialty of Rose Bushes and sell thousands upon thousands. Our bushes are strong, healthy, field-grown stock, well rooted, and will produce a profusion of bloom the first season, if given good care and cultivation. We enjoy the reputation of supplying the best stock at reasonable prices. The following list is the choicest of American and European introductions. All Oregon-grown; worth double Eastern or California.

FOR YOUR CONVENIENCE—CLASSIFICATION UNDER COLORS

This year we have arranged our Roses all under their predominating color, which appeals to us as the most convenient way. While the descriptions are necessarily short on account of limited space, you will get class (read abbreviations below), color and main points of merit.

SHIPPING AND DELIVERY

We can fill orders for our large 2-year-old Rose Bushes any time from October to May—around Portland the best planting time is during favorable weather from November to April, the earlier the better.

BY EXPRESS—We ship all 2-year-old Rose Bushes by express, unless otherwise instructed.

BY PARCEL POST—By request we will wrap, pack and mail Rose Bushes for 10c each, 75c doz. Don't forget the extra for postage when wanted by mail.

ABBREVIATIONS

T.—TEA—One of the best classes of Roses and truly ever blooming. They are hardy in this section, although during our coolest weather and in cold sections they should be protected with a covering of fir boughs, straw or burlap.

H. T.—HYBRID TEA—Most of these are as free flowering and as constant bloomers as the teas, and are hardier, stronger growers.

H. P.—HYBRID PERPETUAL—The hardiest of all roses, vigorous in growth, free blooming.

WHITE—CREAM

British Queen (H. T.)—Pure white, large, full flowers, opening freely. One of the best white roses for bedding and cutting.

Each 75c

Candeur Lyonnaise (H. P.)—Pure white, sometimes tinted with pale sulphur-yellow; very large and full.

Each \$1.00

Florence Forester (H. T.)—Clear snow-white, with a lemon tinge. Perfect habit; very sweetly perfumed. Gold medal.

Each \$1.00

Florence Pemberton.—Large, full flowers, beautifully formed; creamy-white, suffused pink, particularly at center.

Each 75c

Frau Carl Druschki (H. P.)—A large, grand, hardy, pure white; best and most popular.

Each 60c

Gloire Lyonnaise (H. P.)—White, tinted with yellow, large, full and of good shape. Very free, distinct and pleasing.

Each 60c

Kaiserine Augusta Victoria (H. T.)—A strong, vigorous grower, producing buds and flowers of enormous size; color, pure white. A very popular variety.

Each 75c

Mabel Morrison (H. P.)—Splendid white garden and exhibition rose. Flowers large, globular, full and sweet.

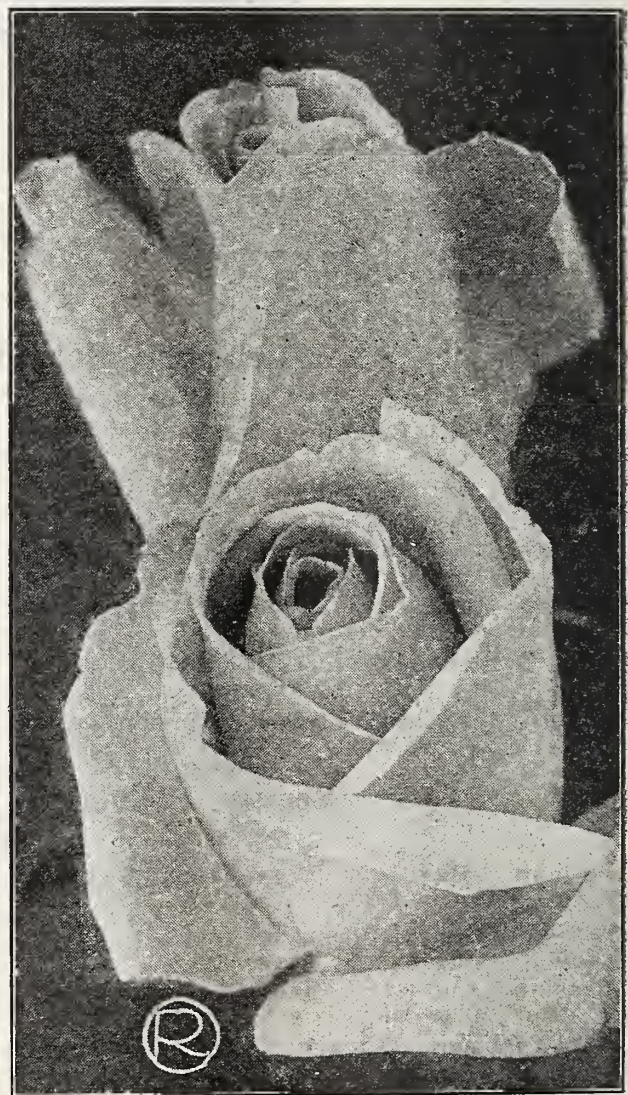
Each 75c

Mrs. Foley Hobbs—A veritable giant among Tea Roses. The beautiful, shell-shaped petals produce a bloom of grand size and build; long stems. Color delicate ivory white, delicately tinged pink on edge of petals. Deliciously scented.

Each \$1.00

White Killarney (H. T.)—Long, pointed buds of purest white and heavy, wax-like texture, opening to large, full flowers; very lasting.

Each 75c



Florence Forester

White Maman Cochet—Has all the good qualities of Maman Cochet, but pure white, equally large and fragrant, hardy and productive. One of the very best white ever-blooming roses for bedding, flowering all season long and until late in the fall.

Each 75c

Chelan Falls, Wash., April 4, 1921.
Routledge Seed & Floral Co.

Gentlemen: Roses and seeds received in good order. The roses are fine, husky bushes and never stopped growing. Am very proud of them.

Yours very truly,
GLENN C. ABBOTT.

Make your Rose Bushes grow and bloom profusely by applying a liberal amount of "C-M" and "Wonder." See pages 38 and 39.

PLEASE NOTE.—Should we be sold out and unable to order, others of a similar color and type and CORRECTLY LABELED with no substitution, UNLESS OTHERWISE ORDERED.

YELLOW ROSES

Constance—Buds long and pointed, of a rich orange-yellow color distinctly streaked and splashed with crimson near base of petals, passing to large, full flowers of bright cadmium-yellow. Very free in bloom. A glorified Rayon d'Or. Each \$1.00

Duchess of Wellington (H. T.)—Intense rich saffron-yellow; very large and of fine form; beautiful in bud as well as open flower. One of the finest offerings of recent years. Each \$1.00

Duchess of Normandy (H. T.)—A beautiful, large, full flower; salmon-flesh, paling to cream at edges. Each \$1.00

Lady Hillingsdon (H. T.)—Deep apricot yellow, long pointed bud. Each \$1.00

Mrs. Aaron Ward (H. T.)—Deep golden-orange, shading out to creamy-yellow at edge of petals. Beautiful deep buds. A delightful variety. Each 85c

Mad. Ravary (H. T.)—Clear orange-yellow; long, pointed buds; flowers of fine form. Each 85c

Mrs. Ambrose Riccardo (H. T.)—A beautiful new yellow Hybrid Tea Rose from Continental Europe. Wonderfully free blooming and vigorous growing for a rose of its class. Buds beautifully formed, honey yellow; very sweet scented. Each \$1.00

Rayon d'Or or Golden Rays (H. T.)—A gorgeous new golden yellow rose; superb. Each 85c

Soliel d'Or (Golden Sun)—A superb color, varying from orange-yellow to reddish-gold, shaded with nasturtium red. Very full and double. Each 60c

Sunburst (H. T.)—Rich cadmium yellow, shaded orange. The buds are very long and beautiful form, opening into a gorgeous colored flower. Each \$1.00

PINK ROSES

Baroness Rothchild (H. P.)—Large size, fine globular form; color bright rosy pink. Each 60c

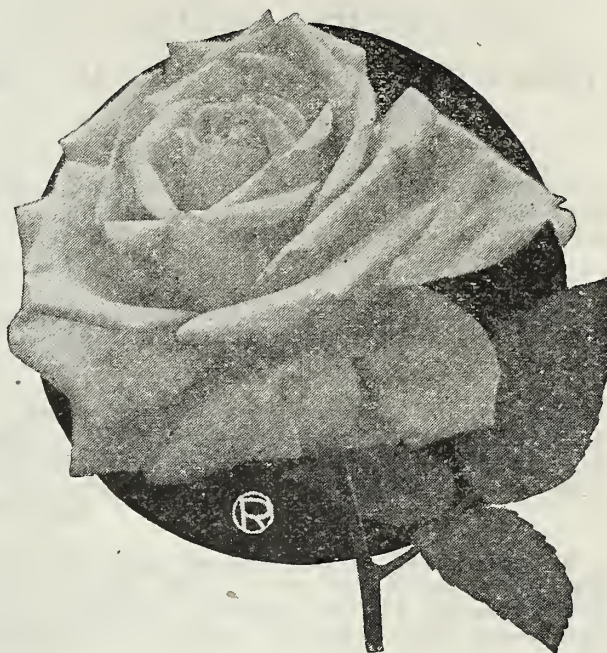
Clio (H. P.)—Flesh pink, center shaded rosy pink. Large, globular form; handsome foliage; vigorous grower. Each 75c

Columbia (H. T.)—This beautiful Rose is of strong, vigorous habit of growth and exceptionally free-blooming. The flowers, which are of good size, are perfect in form, both in bud as well as when fully expanded. In color it is a most pleasing shade of rose-pink and delightfully fragrant. Each \$1.25

Conrad F. Meyer—Very hardy, free bloomer. A beautiful pure, silvery-pink. Fragrant. Each 75c

Duchess of Southerland (H. T.)—Erect and vigorous grower; large, finely-formed flowers of a warm rosy-pink, with lemon-yellow at base of petals. Exceedingly fragrant. Exhibition variety. Each \$1.00

George Arends or Pink Frau Karl Druschki—A beautiful pink variety; different in color from any other rose; a free bloomer and one of the best. Each 75c



Willomere

Killarney (H. T.)—Color deep shell pink; buds long and beautifully formed; open flower is very graceful in the extreme. Each 60c

Lady Alice Stanley (H. T.)—Beautiful long, pointed buds; large, well-formed flowers, of a delicate flesh-pink, outside of petals deep, coral-rose. A gold-medal variety. Each 75c

Los Angeles—Described by the originator as "a flame pink, toned with coral and shaded gold at base of petals." Buds long, pointed and lasting flowers. Each \$1.25

Lady Ashtown (H. T.)—One of the finest pinks of a rich, deep, silvery tone; flowers large. Each 75c

Madame Caroline Testout (H. T.)—Portland's famous brilliant pink rose. Each 60c

Maman Cochet (T.)—One of the finest Tea Roses. Magnificent buds opening into flowers of grand size and build; very lasting and of sweet tea scent. Color, deep rosy pink, inner side of petals shaded silvery rose. Each 75c

Mrs. Wallace H. Rowe (H. T.)—One of the finest rich pink roses grown. Each 85c

Mrs. John Laing (H. P.)—Very free flowering, all season. Color soft, delicate pink, with a satiny tinge. Each 60c

Paul Neyron (H. P.)—Deep, shining rose, double and handsomely formed; blooms freely, and is unusually strong and vigorous; the largest variety in existence. Each 60c

Rose Marie (H. T.)—New rose of great merit. Elegant long buds, large full flowers. A beautiful even shade of rose-pink. Excellent for cutting. Lasts well. Each \$1.00

Willomere (H. T.)—An improvement upon his famous Lyon Rose, being more vigorous in growth and free in bloom. Buds coral red, suffused with carmine, opening into a large, full flower of a rich shrimp-pink, shaded to yellow at the center. Very rich and striking variety. Each \$1.00

BE SUCCESSFUL

Prune your rose bushes when planting—don't leave over 8 to 12 inches of top growth. Try it; you'll get better results.

PLEASE NOTE.—Should we be sold out and unable to obtain some certain varieties of Roses, UNLESS OTHERWISE ORDERED.

TRICOLORS—SHADES OF YELLOW, ORANGE, GOLD, RED AND PINK

Austrian Copper (H. T.)—A single-flowered rose of the June-flowering type. Much admired at the Portland Rose Show.

Each 60c

Betty (H. T.)—Beautiful coppery-rose color, overspread with golden-yellow; fragrant.

Each 75c

Beaute de Lyon—Large, refined flower of a rich coral-red, nicely shaded with yellow. A seedling of Soleil d'Or. Very superior to that variety both in growth and flower.

Each 75c

Gorgeous (H. T.)—Flowers large and full, freely produced on stiff, erect stems; color deep orange yellow, flushed copper yellow, and vined with reddish copper.

Each \$1.00

Edith Part—Another grand exhibition rose as well as an ideal garden variety. Free branching growth with well built up flowers of great substance. Color, rich red suffused with deep salmon and coppery yellow. Perfectly shaped flowers.

Each 85c

Irish Elegance—Bronze orange in the bud, opening into large single flowers of a lighter shade. Vigorous growing and perpetual blooming.

Each 85c

Jonkheer J. L. Mock (H. T.)—It is of the type of La France, with large, round blooms surmounting its stout, almost thornless, canes; color, rich bright pink, reverse of petals carmine.

Each 75c

Joseph Hill (H. T.)—Salmon pink, shaded with yellow, outer petals tinted coppery pink, long bud; very large, full flowers.

Each 75c

Juliet.—Flowers beautifully formed, with petals of fine shape and substance. The color is a bright orange-red on the inside of petals, while the reverse side is of a rich old-gold color. A novel combination of colors and very handsome and showy.

Each 75c

Lady Mary Ward (H. T.)—Free, vigorous and hardy; color rich orange, shaded deeper orange, with metallic veneering.

Each \$1.25

Louise Catherine Breslau (H. T.)—Coral red, shaded chrome yellow, opening to a flower of shrimp-pink, shaded coppery-orange.

Each \$1.00



Gorgeous

ROSE STAKES—Use our white-headed green rose stakes to protect your bushes. See page 116.

Lady Pirrie (H. T.)—Deep coppery, reddish-salmon; inside of petals apricot-yellow, flushed fawn; strong, erect-growing and free-blooming. An ideal variety.

Each \$1.00

Margaret Dickson Hamill—Delicate straw color, its shell-like petals flushed at the edges on the reverse side with delicate carmine-rose. Strong in growth, free blooming and exquisitely fragrant. Bronzy green foliage on deep crimson leaf-stalks. Very distinct and a gem among new roses.

Each \$1.00

Madame Edouard Herriot (T.)—Long, pointed buds, a deep coral red color, shaded to yellow at the base; flower of a rare shade of rosy scarlet, flushed with shrimp and apricot tints.

Each 85c

Mrs. P. W. Vanderbilt—Fine, long-pointed buds, full, well-formed flower, deep orange-red, shaded bronzy-apricot; very free and perpetual. Very desirable.

Each \$1.00

Mademoiselle Cecile Brunner (Dwarf Polyanthus)—Exquisite little roses, buds dainty, pointed, bright salmon pink, yellow center.

Each 60c

Ophelia (H. T.)—The most popular cut flower variety today. Buds orange salmon, opening to a perfect full flower of dainty salmon pink and cream; elegant shape, fine foliage; superb.

Each \$1.00

"C-M" Your Rose Beds

The most beautiful roses are produced by care, cultivation and fertilizer. "C-M" kiln-dried (weed free) ground cow manure, better than the raw material, will do wonders and is much cleaner and nicer to handle. See page 39.

MOSS ROSES

Strong, vigorous growers, much admired for moss-covered buds; hardy; most varieties bloom but once in a season, but remain for a long time and very handsome.

Your choice, White, Pink or Red each 75c.

All 2-year-old rose bushes by express unless otherwise ordered. Read about shipping, inside front cover, and top of page 94.

All 2-year-old rose bushes by express unless otherwise ordered. Read about shipping, top of page 93, and inside front cover.



Hoosier Beauty

RED, SCARLET AND CRIMSON

Augustus Hartman—Brilliant geranium red flushed orange; very large, well-formed flowers with high pointed center. Each 75c

Chateau de Clos Vougeot (H. T.)—A very rich, fiery scarlet shading to deep velvety crimson. It is delightfully fragrant, a prolific and continuous bloomer. Each 60c

Captain Hayward (H. P.)—This is probably the grandest of all red Hybrid Perpetuals. The bloom is of the largest size. Color deep glowing red, flushed with crimson. A free bloomer; deliciously perfumed. Each 50c

Edward Mawley (H. T.)—Of grand size and build and a free, continuous bloomer. Color intense crimson scarlet and of velvety texture. Each 75c

Gen. S. A. Jannsen (H. T.)—Glowing, deep carmine-red; lovely long buds; large, full, fragrant and continuous bloomer; vigorous and compact growth. Each 75c

George C. Waud (H. T.)—Glowing orange vermillion, shaded bright scarlet. One of the richest colored roses in existence. A fine garden and bedding rose. Each 75c

George Dickson (H. T.)—Very large, full and perfectly formed flowers freely produced. Color, blackish crimson of velvety texture, reverse of petals heavily veined with crimson maroon. A magnificent rose, invaluable for exhibition. Each 75c

General McArthur (H. T.)—A grand crimson scarlet. Elegant long buds and the flowers are large, double, of fine form; very fragrant. Each 60c

Gruss an Teplitz (H. T.)—This is a rose for everybody, succeeding under the most ordinary conditions. Rich scarlet, shading to crimson; fragrant; a free, strong grower and in bloom all the time. Each 60c

Hadley (H. T.)—Color beautiful rich, bright red. Very free and constant. A shapely, graceful bud and flower. One of the most charming and distinctive red roses. Each \$1.00

His Majesty (H. T.)—Produces blooms of immense size on fine long canes. Color dark crimson shaded deep vermillion towards the edges. Very fragrant. Awarded a gold medal. Each 75c

Hoosier Beauty (H. T.)—A grand new hybrid tea rose of American origin. Flowers dark crimson, shaded with maroon and veined with black; petals of remarkable substance—like so much crimson velvet; buds beautifully formed, with fine, pointed shape, opening into large, double flower. Each \$1.00

H. V. Machin (H. T.)—A splendid new exhibition rose, because of its grand crimson flowers, wonderful size and form. Splendid high, built-up bloom of very intense coloring. Nothing finer in red roses. Each 85c

Hugh Dickson (H. P.)—This superb Irish Rose stands in the front rank as a producer of the very finest brilliant crimson-scarlet roses. Of strong, vigorous growth and free-flowering habits, one of our most favorite varieties. Each 60c

King George (H. T.)—Strong growing. Flowers very large and full. Deep crimson maroon, with a velvety violet flush. Very distinct. Each 75c

Mrs. Charles Russell (H. T.)—Strong, rank, growth, canes stout and thornless, clothed with handsome, dark-green foliage. Flowers very large and massive. Form globular and very full. Color bright rich cerise, shaded to scarlet at center. A continuous bloomer all season through. Each \$1.00

Rhea Reid (H. T.)—Wonderful flowers of fine size and build, double to the center. A rich shade of cerise-crimson. Each 85c

Ulrich Brunner (H. P.)—Extra large bold flowers, full and globular; color, rich glowing crimson, elegantly flamed with scarlet; a good grower and free bloomer. Each 60c

BABY OR DWARF POLYANTHA ROSES

A type of roses which grow only a foot or two high, bear large clustres of flowers possessing great lasting qualities, and are always in bloom. They are fine for massing in beds, for bordering large rose beds or planted singly on the lawn. Perfectly hardy. Your choice of the following, each 60c; doz. \$6.00.

BABY RAMBLER (Dwarf-bush type)—Not over 18 inches high, producing large trusses of light crimson flowers; clean, dark-green foliage.

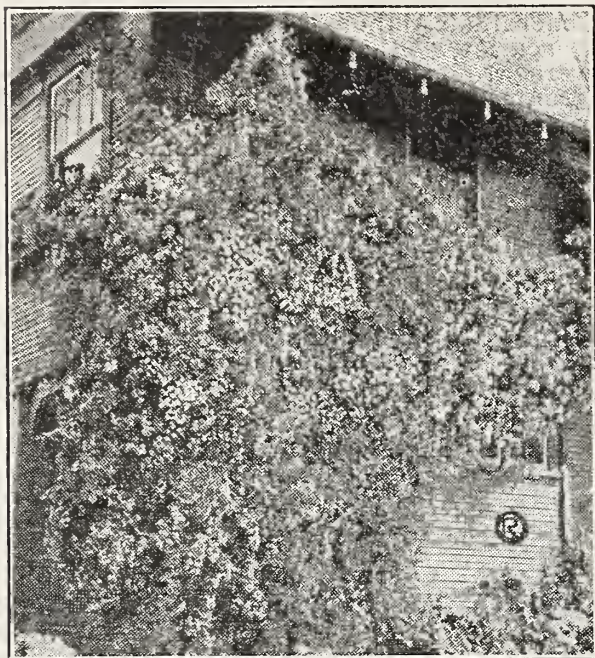
MRS. W. CUTBUSH—Clusters of pretty double, bright pink flowers, freely produced in panicles; always in bloom.

ORLEANS—Color brilliant geranium red, suffused rose, with white center, making a charming combination; bushy habit and very free flowering.

BABY TAUSENSCHON—Pale pink flowers, becoming reflexed with carmine-rose; very beautiful.

SHOULD BUSHES ARRIVE VERY DRY, bury tops and all in damp ground or immerse in a tub of water for a few days. It will benefit them very much.

CLIMBING OR PILLAR ROSES — HARDY, FREE FLOWERING



Dorothy Perkins, 30 ft. High, Thousands of Blooms. A Popular Variety

RAMBLER OR PILLAR ROSES

The following climbing Roses all grow vigorously, and are profuse bloomers and very hardy anywhere. The flowers are borne in large clusters.

Crimson Rambler—This grand rose is well known and very popular; of rapid growth. Flowers in trusses, fairly covering the plant from the ground to the top. **Each 50c**

Count Zeppelin—Immense clusters of small double coral-red flowers borne in great profusion. Very hardy and a rampant climber. **Each 60c**

Dorothy Perkins—(See illustration.) Flowers in immense clusters, beautiful shell pink, very double with petals artistically crinkled. **Each 60c**

Flower of Fairfield—Brilliant crimson; base of petals white. A splendid grower and a great improvement over the old type. **Each 50c**

Hiawatha—A beautiful single flowered variety, with flowers about 1½ inches across, hanging in long pendulous sprays over the entire bush. Color brilliant ruby-eyed with a clear white eye, the center of each flower filled with prominent yellow anthers, a striking and beautiful combination. **Each 60c**

Red Dorothy Perkins—Fine crimson rambler. Glossy-green foliage; never troubled with mildew. Flowers very double. **Each 60c**

Tausendschon (Thousand Beauties)—Entirely distinct. Large single flowers fully 3 inches across; a delightful shade of soft pink, shaded carmine and produced in trusses of from 10 to 15 flowers, each truss a veritable bouquet. **Each 60c**

Yellow Rambler (Aglaia)—Strong grower, profuse bloomer. **Each 60c**

The lavish profusion of bloom on Climbing Roses, literally hundreds of flowers on each plant, their beautiful colors and exquisite fragrance render them unequaled for covering houses, arbors, pergolas, fences and boundary walls.

American Pillar—Flowers saucer-shaped, three to four inches across and very lasting. They hang in immense clusters all along the branches, and make a remarkable sight, a veritable sheet of bloom. Color, clear bright, rosy pink. **Each 60c**

Climbing Safrano—A beautiful pillar rose, being a strong climber; color orange-yellow or deep saffron; good size, full and sweet. A favorite variety in every locality. **Each 75c**

Silver Moon—A magnificent white climber, large, semi-double blooms of good substance, with golden stamens. Foliage is abundant, bronze-green, and is immune to mildew. **Each 75c**

Shower of Gold—A beautiful new climber of the Wichuriana type from the gardens of the famous English rosarian, William Paul. It is of very vigorous growth, with dense, glossy green foliage. Produces masses of golden yellow flowers in large clusters. **Each 85c**

William A. Richardson—Color yellow, flushed with carmine. A very beautiful variety. Extensively planted all over the Pacific Coast. **Each 75c**



TREE ROSES

Good stock has been very scarce, but this year we can supply very nice plants in following kinds: Columbia, General McArthur, Mad. Caroline Testout, Mrs. Aaron Ward, Ophelia, Ulrich Brunner, Frau Karl Druschki, Hoosier Beauty, Ryan d'Or, H. V. Mahin. Prices \$2.00 to \$2.50 each and see general list for descriptions.

SPRAY, PRUNE and FERTILIZE your roses each year and produce prize-winners. We'll tell you "what and when."

HARDY FLOWERING & ORNAMENTAL SHRUBS

NOTE—"D" following the name stands for Deciduous, "E" Evergreens.

Shrubs, deciduous and evergreen, are as much a part of the well-balanced garden as the lawn or flower borders. They are ornamental and highly useful as cut flowers. A well-arranged planting presents an attractive appearance throughout the entire year.

SHIPPING—At the prices given we send large, well-branched bushes from 2 to 5 years old, grown in the open ground. As our shrubs are, for the most part, large and heavy, we usually send them by express or freight. By request, small sizes can be sent by parcel post, but you should add at least 15c to 20c extra per single plant to cover packing and postage.



Deutzia—Pride of Rochester

ABELIA (E)

A beautiful low-growing, bushy, small-leaved evergreen, with dark-green, glossy leaves, bearing small clusters of beautiful pink to white flowers from June until late fall. Very popular. Nice plants, \$1.00; specimens, \$1.50 to \$2.50.

AZALEA (D)

MOLLIS—Blossoms in early spring, before the leaves appear. Pink or White only.

Each \$1.50 to \$2.00

BARBERRY (D)

Fine for massing, banking, hedges or even as single specimens. Dainty, early flowers, showy, small leaved foliage and berries in the fall and winter make them very popular.

THUNBERGII—A beautiful Japan variety of dwarf habit. Small foliage, changing to beautiful red in autumn. Bright scarlet berries all winter. Each 60c, 75c and \$1.00

PURPUREA (Purple Barberry)—Foliage a beautiful deep purple all the year; a splendid specimen shrub and almost indispensable in contrastive groupings.

Each 60c, 75c and \$1.00

BUDDLEIA (D)—Butterfly Bush

MAGNIFICA—Lovely long spikes of lilac-colored flowers, summer and fall. Attracts butterflies. Small plant, 50c; large, 75c to \$1.50.

HAWTHORNE (D)

A beautiful flowering shrub that grows to be a fair-sized tree.

DOUBLE WHITE or **RED**—4 to 6 ft., \$1.00; 6 ft. up, \$1.25 to \$1.50.

COTONEASTER (E)

Very popular plants with minute, deep, glossy green foliage and bright red berries that hang on all winter.

Small plants of the following, 50c to 60c; large plants, \$1.00 to \$1.50 each.

HORIZONTALIS—Of trailing or prostrate habit of growth; admirable for covering low walls or to use in rock work. Pinkish-white flowers, bright red berries.

MICROPHYLLA (E)—Smaller shrub than above variety, evergreen leaves; white bloom, berries bright red and last well.

SIMONDSII (D)—A beautiful upright growth with fruit of a rich, deep orange color.

DEUTZIAS (D)

Their hardihood, fine habit, luxuriant foliage and profusion of attractive flowers in May and June render them among the most beautiful and most popular of flowering shrubs.

Your choice, each 60c to 75c

GRACILIS ROSEA—Dwarf growing with sprays of pretty light pink flowers late in the spring. A beautiful shrub.

LEMOINEI—Flowers very large and produced in broad-based, cone-shaped heads of from 20 to 30 flowers each, of purest white; 3 to 4 feet.

PRIDE OF ROCHESTER—Flowers very early, double; pure white, tinged with blush; great profusion. Grows 6 to 8 feet.

DOGWOOD (D)—Cornus

Very desirable little graceful shrubs.

Sibirica (Red Siberian Dogwood)—A rare and remarkable variety; clusters of white flowers in spring. Each, 2-3 ft., 60c to 75c.

FLOWERING CURRANT (D)—Rabis

Popular early flowering shrubs that do well any place. Their bright flowers are very cheerful. Each 75c

Sanguineum—Charming crimson flowers.

Aureum—Yellow flowers; spicy odor.

FORSYTHIA (D)—Golden Bells

INTERMEDIA—Blooms early in spring, before the leaves appear, when it is covered with golden, bell-like flowers. 2 to 3 ft.

Each 60c to 75c

FORTUNEI—Upright; makes fine single specimens; golden flowers in profusion in April. Each 60c to 75c

GEINSTA (E) Broom

Bushy, upright evergreens. Flowers freely in early spring.

ALBA—Pure white.

Each 50c to 75c

ANDREANA—Red and yellow flowers; very pretty. Each \$1.00

SCOPARIA (Scotch Broom)—Rapid growing; yellow flowers in May. Each 50c to 75c

SPANISH—Yellow flowers; elegant foliage; blooms all summer. Each, 2 to 3 ft., \$1.00

Feed Your Plants—You must supply "food," in other words, fertilizer, if you want the best results. Read about "Wonder" and "C-M," page 39.

HARDY FLOWERING SHRUBS AND ORNAMENTALS—Continued

HYDRANGEA (D)

HORTENSIA—One of our most popular and showy lawn plants. Often grows in pots or tubs. Ornamental foliage and beautiful flowers in large, flat trusses. (See cut.) The beautiful pink variety is most popular, but we can supply **White, Pink or Blue**. Young plants, 50c. Large plants, according to size and number of flower shoots, 75c, \$1.00, \$1.50. Large specimen plants, \$2.50 to \$4.00. (See cut.)



Hydrangea Paniculata Grandiflora

PANICULATA GRANDIFLORA — The grandest as well as the most popular of all shrubs, and hundreds of thousands of them are sold every year; excellent for hedges or massing; unsurpassed for the lawn; blooms in July and August, and continues in bloom for two or three months. The flowers are massive, cone-shaped, sometimes 10 inches in length, and changing from the original pure white to pink, and finally to a beautiful rich coppery red.

Young plants, 50c; strong plants, 2 feet and up, each 75c to \$1.00.

Tree shaped, \$1.50 to \$2.00.

LILACS (D)

Everyone loves the lilac and no garden is complete without one or more. The new imported grafted varieties are very beautiful and produce magnificent, large flowers.

COMMON WHITE OR PURPLE.

Each, 3 to 4 ft., 75c to \$1.00; larger, \$1.50 to \$2.00.

IMPORTED BUDDED VARIETIES—Your selection following named varieties, 3 to 4-year-old select plants, \$1.50 to \$2.00.

GEORGE BELAIR (Single) — Beautiful flowers, purple.

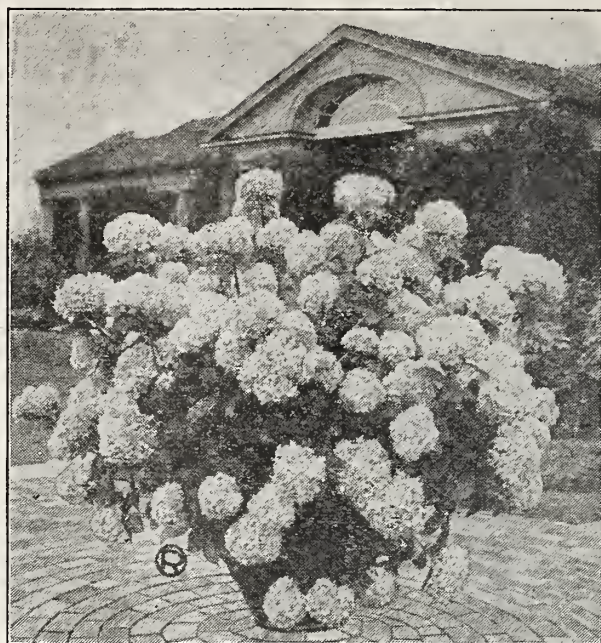
MARIE LE GRAYE (Single) — Beautiful creamy white flowers of immense size.

MME. LEMOINE (Double) — Fine double white variety; very fragrant.

MAD. CASIMIER PERIER (Double) — Fine creamy white.

MICHAEL BUCHNER (Double) — The best pale lilac or lavender.

CHARLES BALTET (Double) — Long trusses; double; beautiful rosy lilac or purple.



Hydrangea Hortensia

QUINCE (D) Cydonia

JAPONICA—Bright scarlet single, flowers very early in the spring, before the leaves appear. Thorny, compact growth. One of our best hardy shrubs. Small, each 60c; large, 3 to 4 ft., each 75c to \$1.00.

REBIS—See Flowering Currant.



Single Lilac—Marie Le Graye

"Worth Dollars—Get Wise"

PRACTICAL LANDSCAPE GARDENING

This new book, written by Robt. B. Gridland, is without a doubt the best book on this subject. Contains 91 illustrations, 67 sketches and 33 plans. Enamel paper well bound, 266 pages. Price, \$2.65, postpaid.

NOTE—Limited catalog space enables us to catalog only a part of the beautiful shrubs we can supply. Write for prices on any kind not listed that you want.

SPIREAS (D)

Graceful shrubs, everyone should plant. They are of the easiest culture, and very desirable in collections. All the Spireas bloom with a riotous extravagance which makes them quite striking. Their individual style, color and habits of growth differ so markedly, that a collection of varieties will insure bloom the entire season.

VAN HOUTTEI (Bridal Wreath)—The grandest of all the Spireas. It is a beautiful ornament for the lawn at any season, but when in flower it is a complete fountain of white bloom, the foliage hardly showing; perfectly hardy and an early bloomer. (See cut.) Small plants, 60c; large 75c to \$1.00

THUNBERGII—Of graceful habit; the branches are slender and somewhat drooping; foliage in autumn changes to bright red and orange; flowers in feathery masses, white, appearing early.

Small plants 60c; large 75c to \$1.00

ANTHONY WATERER—Covered nearly the whole growing season with large umbels of deep crimson flowers.

Small 60c; large 75c to \$1.00, postpaid

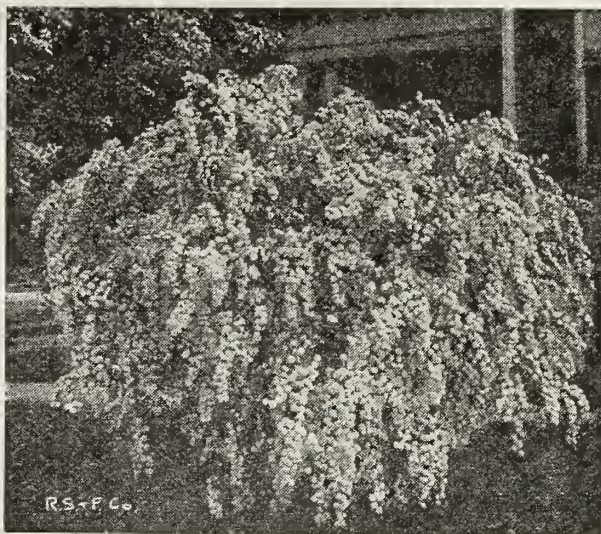
SNOWBALL (D)

STERILIS (Common Snowball)—Blossoms in latter part of May. Flowers pure white, large balls. Every one should plant a Snowball. Each, small plants, 60c; 3 to 4 ft., each, \$75c to \$1.00; extra choice, 5 to 6 ft., \$1.25 to \$1.50.

PLICATUM (Japanese Snowball)—One of the most charming hardy flowering shrubs in existence; bears great wreaths and clusters of pure white globular masses of flowers; covered with bloom for weeks in the spring; grows 4 to 6 feet high; entirely hardy. Each, 2 ft., 75c; 2 to 3 ft., \$1.00.



Weigela (Flowers one-half Natural Size)



Spirea Van Houtte

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**ALWAYS REMOVE** the packing and moss from the trees before planting. **NEVER** put manure so as to come in contact with the roots of any plant or tree. Use only good soil on and around the roots.  
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SYMPHORICARPUS (D)

ALBA (Snowberry)—Inconspicuous, rose-colored flowers in June and July, followed by large, clustered, milk-white berries, which remain far into the winter.

2 to 3 feet, each 60c to 75c

RUBRA (Indian Currant)—Similar to the Snowberry, except that its berries are red and smaller and cluster thickly about the stems and branches.

2 to 3 feet, each 60c to 75c

PHILADELPHUS (D)

Mock Orange—A valuable class of hardy shrubs of vigorous growth, bearing for the most part fragrant white flowers during late spring and early summer.

AUREA—Beautiful golden yellow foliage, white flowers of orange-like fragrance. Each 75c to \$1.00.

LEMOINEI—Slender, graceful branches covered with snowy white flowers of delightful fragrance. Each 60c and 75c.

VIRGINALE—Dwarf growing syringa covered in June with pure white flowers. Very fragrant. Each 60c and 75c.

TAMARIX

AFRICANA—A tall, slender growing shrub with fine, feathery foliage like that of a Juniper. Branches covered in the early summer with delicate pink flowers. A graceful and beautiful shrub. Each 75c to \$1.00.

WEIGELA (D)

Beautiful shrubs that bloom in May, June and July. The beautiful trumpet-shaped flowers are produced in so great profusion as to almost entirely hide the foliage. They are very desirable for the border or grouping, and as specimen plants.

Prices: Following, each 60c, 75c and \$1.00.

CANDIDA—Beautiful white flowers; a continuous and profuse bloomer; very hardy.

ROSEA V—Lovely, large, rose-colored flowers, borne in such profusion that the whole bush appears a mass of rosy bloom.

EVA RATHKE—This variety is quite scarce and rare. Has beautiful blood-red flowers. Free bloomer. Each \$1.00.

DON'T

Be misled by the fine catalogs with little prices sent out from the East. Buy our field-grown plant, much larger and better than the weakly Eastern stock.

EVERGREEN SHRUBS AND TREES

In moving evergreens, they are generally taken up with a ball of earth about the roots; this makes it necessary to ship them by express or freight only. The stock we offer has been moved in the nursery every two years. This insures their living, and they are worth double the ordinary stock.

ACUBA

JAPONICA—Beautiful, broad-leaved evergreen, with leaves speckled and striped golden yellow; elegant shrub for specimen on the lawn or for planting among other shrubbery; bears bright red berries in winter time. 1 to 1½ ft., \$1.50 to \$3.00; very scarce.

ARBOR VITAE

An attractive, hardy, compact, upright evergreen of beautiful appearance. Green or Golden. Each \$2.50 to \$5.00

AZALEA

A. CRIMSON—A hardy evergreen species. These are dwarf, compact growers. Foliage small; flowers dazzling crimson. Each \$2.50

BOXWOOD

A compact, small leaved evergreen that can be trimmed into balls, box or pyramidal shape.

DWARF, COMMON—Fine for borders, edgings or low hedges. Hedge plants, 6 in., each 30c; per 100, \$25.00. Specimen plants Globe or Pyramid shaped. Each \$2.50 to \$5.00

CEDAR

DEODORA (Deodar or Indian Cedar)—Of vigorous growth; pyramidal form; graceful foliage of a light, silvery or glaucous green. Each, 2 ft. up, \$3.50 to \$5.00

EUONYMOUS

Slow growing, compact, pretty leaved shrub.

JAPONICA—Green or Variegated. Very attractive. Each \$1.50 to \$2.50

HOLLY

Very popular everywhere.

English (Aquifolia)—Budded stock, guaranteed berry-bearing. Well balled and carefully packed. Each, 2 to 3 ft., \$2.50 to \$3.50; specimen plants, 3 to 5 ft., \$5.00 to \$7.50 and up.

JUNIPER

IRISH—Very desirable, pyramidal in form, foliage light green or silvery gray.

Each, 2 to 3 ft., \$2.00 to \$3.00

LAUREL

ENGLISH—A small tree, or bush, with handsome shining thick foliage. Excellent for large hedges or screens or as single specimens. 18 to 24 inches, each 75c; 2 to 3 ft., \$1.00; 3 to 4 ft., \$1.50.

LAWSON CYPRESS

A very popular evergreen for single specimens or hedges. Small size. Write. Specimens, \$2.00 up.

LAURUSTINUS

Beautiful evergreen shrub with bright shining green leaves and covered in the late fall, winter and early spring with large panicles of fragrant white blossoms. Small, \$1.00 each; 1½ ft., \$1.50; 2 to 3 ft., \$2.00 to \$3.00.

PRIVET

One of the best hedge plants; has small, pointed, evergreen leaves; grows rapidly and compactly; stands severe pruning, and can be kept in fine shape with little care.

CALIFORNIA—Most common variety.

ENGLISH—Smaller leaf, darker.

Strong field plants, 12 in. up, per 10, \$1.25; per 50, \$4.50; per 100, \$8.00; 2-year-old plants, 24 in., per 10, \$1.50; per 50, \$5.50; per 100, \$10.00.



RHODODENDRON PLANT
"Balled in earth." Can be moved any time from October to June. Not mailable.

RHODODENDRONS

Stock very scarce. We have a limited number of choice budded named varieties that will bloom this year in White, Lavender, Pink and Red. Small, \$3.50 each; regular size, \$5.00 and up.

RETINOSPORA (E)

One of our most showy and graceful evergreens. There is a large class of Retinosporas, but the most popular are those of compact, tufted character. Choice, well-shaped plants in Green or Golden, \$2.50 to \$3.50 and up.

YUCCA

A stately foliage and flowering plant equally imposing in solitary or group plantings, always conspicuous. The broad, sword-like foliage is evergreen; while midsummer shows great erect branching stems bearing a showy display of pendant, creamy-white bells.

Prices: 2-year and up, 50c, 75c and \$1.00; 18 to 24 in., \$1.50.

OTHER EVERGREENS—If you want Evergreen Plants or Shrubs not listed above, write us for prices. There are limited quantities of many kinds in our local nurseries but not enough to catalog. We'll be glad to quote prices and secure stock of anything available.

If there is any information or advice that you wish, we will be glad to serve you to the best of our ability. Twenty years' practical experience on the Coast enables us to serve you intelligently.

NUT TREES

RAISE ENGLISH WALNUTS—We can successfully raise English Walnuts here in the Pacific Northwest, and the quality of the nuts is superior to most other sections. Plant a tree or two at least, for your own use, and if you have a large place, plant more. While the cost of grafted stock is more, we advise you to plant them, as there is "no chance" as to quality of the nuts.

WALNUTS (D). Grafted Stock—This year we are prepared to supply you with Oregon-grown trees that are extra select and **ESPECIALLY FINE ROOTED**, much superior to the California trees on account of the fine growth of strong, fibrous roots. The stock we offer is Voorman's famous Franquette grafted on California black walnut roots.

Prices: 4 to 6 ft., each \$2.00; per 10 \$17.50; 6 to 8 ft., each \$2.50; per 10 \$20.00.

SEEDLING STOCK—Not grafted. Prices: Each, 4 to 6 ft., \$1.25; 6 to 8 ft., \$1.50.

HICKORY NUT—3 to 4 ft., \$2.00.

BUTTERNUT—75c to \$1.00.

ALMONDS—IXL-Nonpareil or Ne Plus Ultra—1 year, 3 to 5 ft., each 75c; 10 for \$6.00; 100 for \$50.00.

JAPANESE CHESTNUT—3 to 5 ft., \$1.00.

FILBERTS—Barcelona and Du Chilly—2 to 3 ft., each 75c; doz. \$7.50; suckers 50c each; \$5.00 doz.

SHADE AND ORNAMENTAL TREES

The following are our most popular varieties. If you want some other kind, inquire; we, no doubt, can supply.

NOTE—We make a packing and shipping charge on out-of-town orders as follows:
One tree, 50c; 6 trees, \$1.00; 12 trees, \$1.50.

BIRCH (D)

Remarkable for its elegance; very graceful; silver bark and slender branches.

EUROPEAN WHITE—6 to 8 ft. Each \$1.50

WEeping CUT-LEAVED (alba lancinata pendula)—Charming tree; gracefully drooping branches, silvery white bark and delicately cut foliage present a combination of attractive characteristics rarely met with in one tree. 7 to 8 ft., \$2.25; 10 ft., \$3.00

CATALPA (D)

A beautiful shade tree. White flowers in July.

SPECIOSA—6 to 8 ft., each \$1.50.

CHESTNUT (D)

Very popular, stately shade trees. Extensively planted for shade.

HORSE, EUROPEAN, RED FLOWERING—Much slower grower than the white. 5 to 6 ft., \$1.25 to \$1.50.

HORSE, WHITE FLOWERING—4 to 5 ft., \$1.00; 6 to 8 ft., \$1.25; 9 to 10 ft., \$1.50; 10 to 12 ft., \$2.00.

AMERICAN SWEET—4 to 6 ft., \$1.25.

SPANISH—4 to 6 ft., \$1.25; 7 to 8 ft., \$1.50.

ELM (D)

One of the most popular and best shade trees. Very desirable for street.

AMERICAN WHITE—6 to 8 ft., each \$1.50; 8 to 10 ft., \$2.00.

LINDEN (D)

Very desirable and beautiful trees for park or street planting; large heart-shaped leaves, white flowers; rapid growers. 8 ft. up, each \$1.50 to \$2.00.

MAPLE

SILVER VARIEGATED (A. Negunde Variegatum)—Most attractive; leaf is variegated white and green. 4 to 6 ft., \$1.50; 6 to 8 ft., \$2.00.

TRANSPLANTING—When transplanting trees of any kind, trim and prune off one-fourth to one-third of last year's growth; the cut roots cannot support the full top the first season.

NOTE—Write for special prices if you want shade trees in quantities for large plantings.

LARGE GROWING MAPLES FOR SHADE

Your choice of the following kinds: 7 to 8 ft., \$1.25; 8 to 10 ft., \$1.50; 10 to 12 ft., \$2.00.

NORWAY—Of large, compact habit; broad, deep green shining foliage, and stout, vigorous growth.

OREGON—Wide-spreading branches and large foliage; very rapid growth.

SILVER OR SOFT—Native tree of rapid growth; foliage bright green above and silvery white beneath.

SUGAR or HARD—Of upright habit of growth; dense shade; extensively used.

ASH-LEAVED—A fine, rapid-growing variety, with handsome, light green foliage and spreading head; very hardy; desirable for street planting.

PURPLE-LEAVED SYCAMORE MAPLE—A purplish tone is imparted to the tree by the purple under-surface of its leaves; the effect being very fine when the leaves are in motion.

MOUNTAIN ASH (D)

Very ornamental trees, especially when covered with its clusters of red berries in the fall. 7 to 8 ft., \$1.25; 8 to 10 ft., \$1.50.

POPLAR (D)

These well known trees are planted largely for windbreaks and ornamental purposes; very rapid growers.

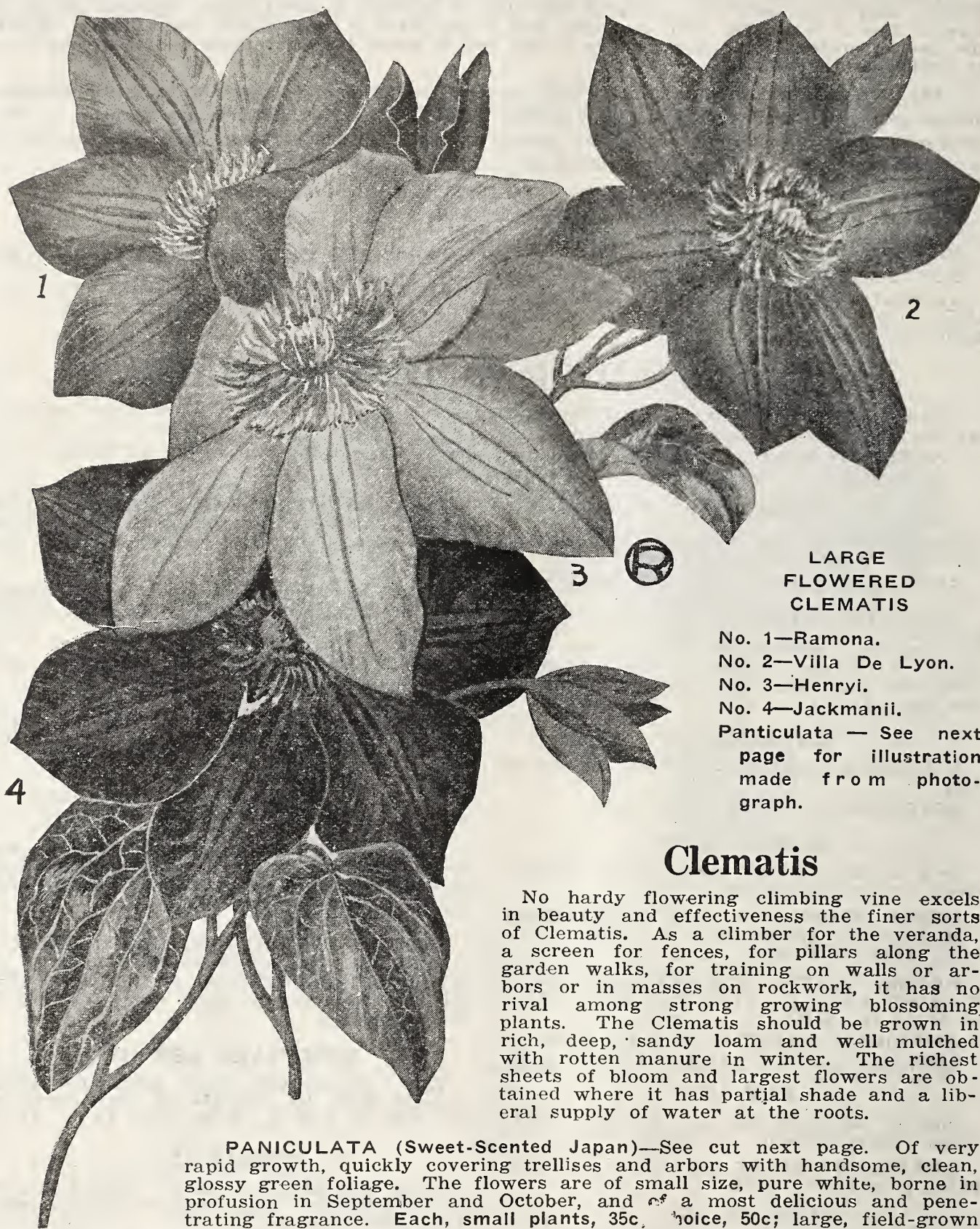
CAROLINA—Pyramidal; **LOMBARDY**—Tall and spiral, 7 to 8 ft., 75c; 8 to 10 ft., \$1.00.

NOTE—Very low price for quantities.

TULIP TREE (D)

A rapid-growing tree, with rich, glossy foliage; flowers tulip-shape, greenish yellow; a fine shade tree. 6 to 8 ft., \$1.25 to \$1.50.

BEAUTIFUL HARDY CLIMBING VINES



LARGE
FLOWERED
CLEMATIS

No. 1—Ramona.
No. 2—Villa De Lyon.
No. 3—Henryi.
No. 4—Jackmanii.
Paniculata — See next
page for illustration
made from photo-
graph.

Clematis

No hardy flowering climbing vine excels in beauty and effectiveness the finer sorts of Clematis. As a climber for the veranda, a screen for fences, for pillars along the garden walks, for training on walls or arbors or in masses on rockwork, it has no rival among strong growing blossoming plants. The Clematis should be grown in rich, deep, sandy loam and well mulched with rotten manure in winter. The richest sheets of bloom and largest flowers are obtained where it has partial shade and a liberal supply of water at the roots.

PANICULATA (Sweet-Scented Japan)—See cut next page. Of very rapid growth, quickly covering trellises and arbors with handsome, clean, glossy green foliage. The flowers are of small size, pure white, borne in profusion in September and October, and of a most delicious and penetrating fragrance. Each, small plants, 35c, choice, 50c; large, field-grown plants, 60c and 75c each.

C. MONTANA.—A hardy, rapid grower; flowers snow white; fragrant and freely produced in May and June. Strong plants, 60c to \$1.00.

LARGE FLOWERING—The following kinds bloom early and remain a long time. Very large and showy. Your choice of the following strong, two-year-old, field-grown roots, \$1.00 each, postpaid:

Ramona—Beautiful sky-blue or lavender; very free flowering.

Ville de Lyon—The best bright red; equal to Jackmanii in size.

Henryi—Fine large creamy-white flowers. A strong grower and great bloomer.

Jackmanii—Intense violet-purple; most popular variety; extra large flowers in great clusters.

Duchess of Edinburgh—A free flowering double white variety; very fragrant.

Important.—When planting Clematis and other vines be sure you spread out the mat of fine roots so that the soil comes in contact with all of them, otherwise they will dry cut and die. Be very careful with Clematis especially. Don't plant too close to wall.

HARDY CLIMBING VINES—Continued

AMPHELOPSIS

VEITCHI (Boston Ivy, or Japan Ivy)—The most popular and desirable climbing plant for covering brick, stone or cement walls, etc.; when it becomes established at the root it is of very rapid growth and clings to the smoothest surface. The foliage is of a rich olive green during the summer, changing to various shades of bright crimson and scarlet in the fall. In planting cut back to within 6 inches of the ground, so that the new growth may cling to the wall from the bottom up. Strong plants, 50c to 60c; extra strong, 75c to \$1.00.

QUINQUIFOLIA (Virginia Creeper, or American Ivy)—This well-known climber is one of the best and quickest growing varieties for covering trees, trellises, arbors, etc.; its large, deep green foliage assumes brilliant shades of yellow, crimson and scarlet in the fall. Strong plants, 50c to 60c; extra strong, 75c to \$1.00.

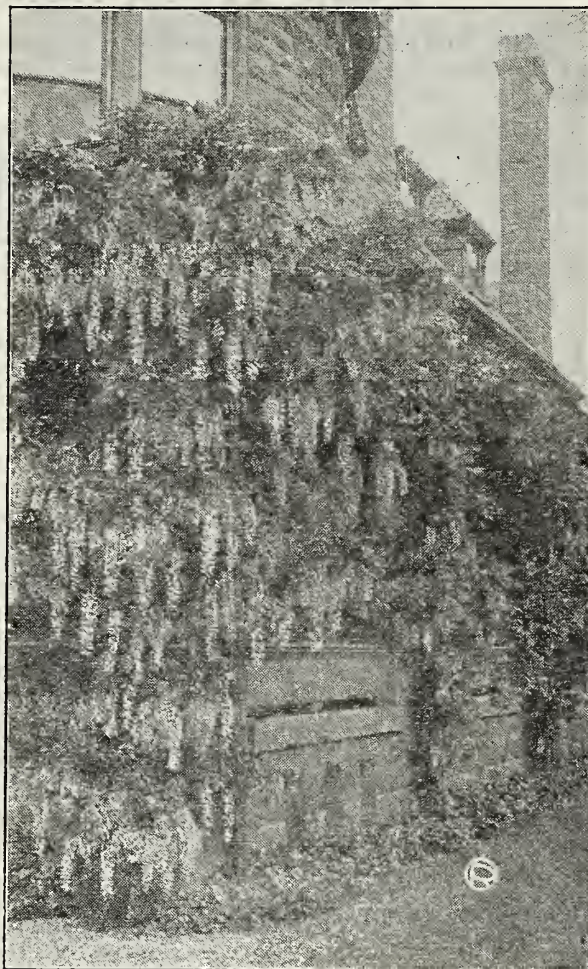
HONEYSUCKLE

A beautiful climber, rapid grower and very desirable; flowers very fragrant, and produced in great profusion.

Your choice of the following, 60c to 75c each; extra strong, \$1.00.

Halleana—Very popular; almost evergreen; profuse bloomer; flowers white, passing to yellow.

Belgica (Monthly Fragrant)—Flowers are large; color red and yellow.



Wistaria Vine in Bloom

IVY EVERGREEN

COMMON ENGLISH—Thick, leathery, evergreen leaves. Strong grower. Good roots, each 25c; large 50c.

EUONYMUS

One of the finest evergreen vines, with small, rich green leaves and foliage. For covering rocky banks, rough walls, tree trunks, etc., also for vases, boxes and borders of beds.

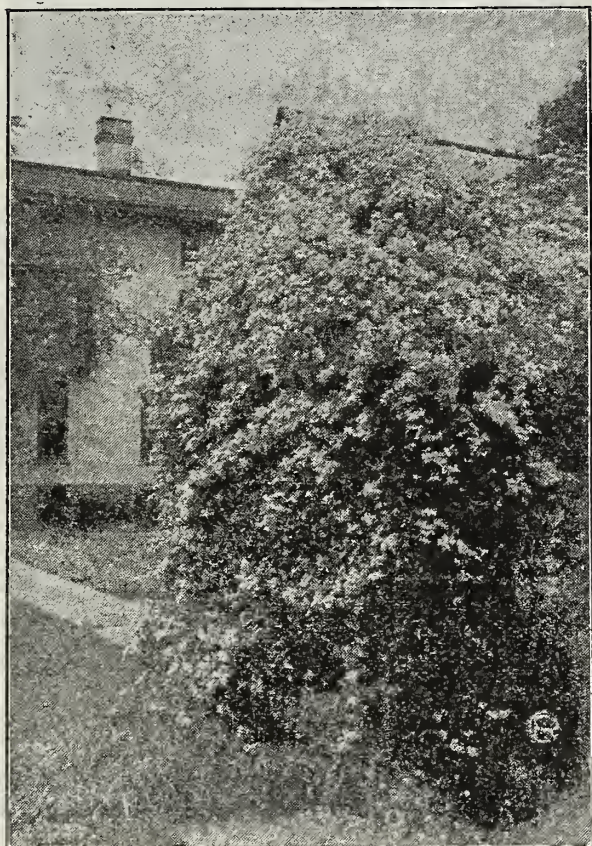
GREEN OR VARIEGTAED—Each 50c to 75c; doz. \$5.00 to \$7.50.

WISTARIAS

WISTARIAS—The strongest growing of all hardy vines, easily reaching the roof of a two-story building in a few years if given a chance to climb. Our illustration gives an idea of the value of these vines as a decorative subject. They are as hardy as an oak tree and will grow and bloom in any locality. The flowers appear with the first laeves late in the spring and hang like great bunches of grapes, to the admiration of all who see them. All the varieties are very sweet-scented, as can be attested to by the bees, who are attracted to them when in bloom in the spring.

SINENSIS BLUE—A very rapid growing, hardy climber; lovely long panicles of dark blue flowers, produced in the most wonderful profusion. Strong vines. Each \$1.50 to \$2.00.

SINENSIS ALBA—Like the preceding, but with beautiful white flowers in long panicles. A veritable sheet of bloom in late spring. Strong vines. Each \$1.50 to \$2.00.



Clematis Paniculata

JASMINE

Graceful, medium-sized climber; beautiful foliage and pretty flowers. White, Yellow; each 75c.

Beesiarium—New double pink; \$1.00.

"MAKE 'EM HOP"—If you will mix a cup full of Wonder Fertilizer with 5 lbs. "C-M" and work both thoroughly into the soil around your climbers, you will get wonderful growth and lovely flowers. See page 39.

Fruit Trees, Bushes, Vines and Plants

OUR SHIPPING SEASON for the above is from November 1 to April 1. Some seasons May 1, although it is too late for best results. We advise late fall or early spring planting while stock is dormant.

HOW WE SHIP—Unless otherwise instructed, we ship by express or freight, whichever is cheapest. In extreme cases and when necessary, 1-year fruit trees, 3 to 4 feet only, can go by parcel post at an increased cost of 25% on per 10 or dozen prices, or 15c each on single trees, to cover postage and careful packing.

CARE OF STOCK UPON ARRIVAL—If you are not ready to plant, dig a trench and “heel” in. If ground is frozen, put in a cellar and keep roots damp.

NO STOCK SENT C. O. D.

SUBSTITUTION When varieties of the tree ordered cannot be supplied or bought locally, others equally as good of the same season and correctly labeled will be substituted, unless otherwise ordered.

APPLES

Unless otherwise priced	Each	Per 10	100
One year, 3 to 4 ft....	\$.40	\$3.50	\$30.00
One year, 4 to 6 ft....	.50	4.50	40.00
Selected .....	.75		
Write for our low prices per 1000.			

SUMMER VARIETIES

RED ASTRACHAN—Medium deep crimson, flesh white, moderately juicy, with an agreeable rich flavor; very productive.

YELLOW TRANSPARENT—Medium size, roundish, slightly conical; skin pale yellow, flesh tender, juicy, sub-acid; good.

AUTUMN VARIETIES

GRAVENSTEIN—Large, beautiful yellow, dashed with deep red and orange; tender and crisp, with a highly aromatic flavor; tree very vigorous; very popular sort.

KING OF TOMKINS COUNTY—Very large, globular; red striped; vigorous and productive; excellent quality; juicy, rich flavor.

WEALTHY—Medium, whitish yellow, shaded with deep red; flesh white, tender and juicy.

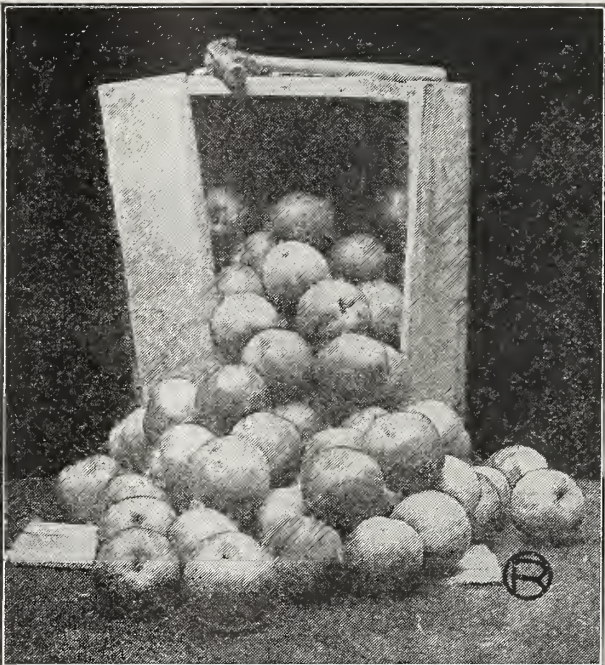
WINTER VARIETIES

BALDWIN—Large, rounded; deep, bright red; very productive; one of the best and most popular winter apples.

DELICIOUS—A splendid apple; coming ing prominence rapidly. Tree vigorous and hardy and the fruit equals the name in every respect. Fine for market and home use; late; keeps till April.

NORTHERN SPY—Large, round, greenish-yellow, stripes of purplish red; flesh white, juicy, brisk sub-acid; valuable for market and cooking.

ORTLEY (White Bellflower)—Fruit medium to large, yellow; sometimes with a sunny cheek; flesh white, fine-grained, tender, juicy, sub-acid.



SPITZENBERG—Large, oblong, yellowish ground with broken stripes of bright red; flesh yellow, juicy, with a delicious rich flavor.

WINTER BANANA—Winter; yellow; blush cheek; sub-acid; medium size; a good keeper; a handsome apple; fine flavor, tender and delicious.

YELLOW NEWTOWN PIPPIN—Large, skin smooth, golden yellow; flesh firm, crisp, juicy; one of the standard varieties.

GRIMES' GOLDEN—Of the highest quality; large, yellow; very productive.

JONATHAN—Yellow, covered with red; of excellent quality and heavy cropper.

RHODE ISLAND GREENING—Greenish yellow; large; very rich flavor.

ROME BEAUTY—Large, yellow, shaded bright red; juicy sub-acid; good bearer.

WINESAP—Medium size, streaked with red; firm, crisp and excellent; widely cultivated.

CRAB APPLES

Each 75c; per 10, \$6.00

TRANSCENDENT—Fruit very large, skin yellow, striped with red; the best of its class for cider. September.

YELLOW SIBERIAN—Fruit small, golden yellow; good variety. Ripens in August.

FLORENCE—Size medium; red striped; early bearer; bearing full crop each year; tree immensely productive; juicy and crisp. September.

HYSLOP—Large, dark crimson; popular; a hardy variety. Late.

NOTE—Order other varieties if you wish. We have many kinds not listed.

CHERRIES

Unless otherwise priced	Each	Per 10	100
1 year, 4 to 6 feet...	1.25	10.00	90.00
Selected, 1 year.....	1.50	12.50	
Selected, 1 year.....	1.25	10.00	

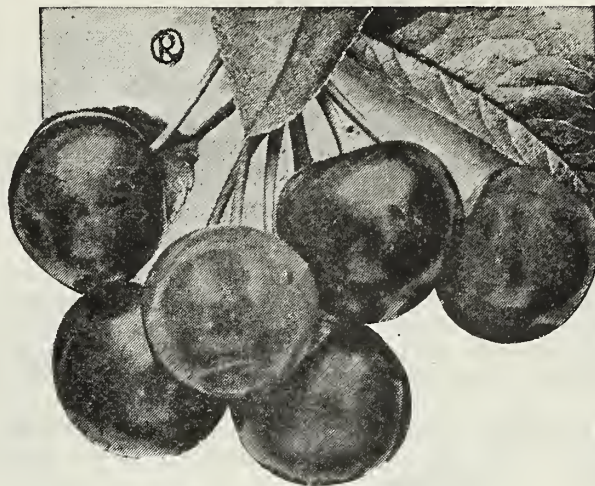
✓ **LAMBERT**—Fruit of largest size and of fine quality; color deep, rich red; flesh firm and of fine flavor; a fine market variety; ripens two weeks later than Royal Ann.

✓ **ROYAL ANN** (Napoleon Bigarreau)—A magnificent cherry of the largest size; pale yellow, becoming amber in the shade; richly dotted and spotted with deep red and with a bright red cheek; flesh very firm, juicy and sweet; tree a rapid grower and immense bearer.

✓ **BING**—Originated in Oregon; fruit large, dark brown or black; very fine; late; a good shipping variety.

✓ **KENTISH** (Early Richmond)—Light red, juicy; one of the best acid cherries and unsurpassed for cooking purposes; very productive.

✓ **LATE DUKE**—Large, light red; late and excellent; sub-acid.



✓ **NEW—THE "BURBANK"**—A rich, fine flavored, dark red cherry, sweeter than other early varieties; a good shipper, vigorous grower and never failing producer. Each \$1.50

✓ **MONTMORENCY**—Large, sour fruit, similar though larger than the Early Richmond; quite hardy. May.

✓ **MAY DUKE**—Large, rich, dark red; flesh tender, juicy and sub-acid; an excellent variety, and one of the earliest of its class.

PEACHES

Unless otherwise priced	Each	Per 10	100
1 year, 4 to 5 feet...\$	.75	\$5.00	\$50.00
Selected, 1 year.....	1.00	8.00	

✓ **EARLY CRAWFORD**—Very large, yellow; with red cheek; flesh sweet and excellent. Our most popular peach for table and canning; freestone.

✓ **EARLY ALEXANDER**—One of the largest and best of the extra early varieties; almost freestone; tree bears young.

✓ **ALBERTA**—Very large, bright yellow, red cheek; flesh yellow; juicy, sweet; regular bearer; fruit very showy and perfect; freestone; early.

✓ **EARLY CHARLOTTE**—An improved seedling from Early Crawford, originated at Salem, Ore. This remarkable peach succeeds in Oregon, where many other varieties fail. Flesh yellow, melting and juicy, with a rich and excellent flavor; freestone; ripens ten days after Crawford's Early.

✓ **LATE CRAWFORD**—Very large, roundish; yellow, with dark red cheeks; flesh deep yellow, juicy and melting; flavor rich and excellent; very popular; valuable for canning and drying; freestone.

✓ **HALE'S EARLY**—Skin greenish white, red cheek, flesh white; juicy and sweet; semi-freestone; very early and good.

✓ **MUIR**—Large, pale yellow, very firm and sweet. Best for drying; freestone.

✓ **SALWAY**—Creamy yellow, red cheek; flesh deep yellow, red at the pit; rich and sweet. A standard late peach. Freestone.

PLUMS

Unless otherwise priced	Each	Per 10	100
1 year, 3 to 4 feet...\$	.40	\$3.50	\$30.00
1 year, 4 to 6 feet...	.50	4.50	40.00
Selected .....	.75		

✓ **COLUMBIA** (Shipper's Pride)—Largest size, nearly globular; brownish purple; rich, sugary; freestone. August.

✓ **PEACH**—Very large; skin brownish-red, slightly coarse-grained, but juicy; freestone; very popular as a home and market variety. August.

✓ **DAMSON**—Small, oval; skin purple; flesh melting, rather tart. September.

✓ **MAYNARD**—Very large, nearly round; crimson-purple, bears young; flesh firm, but melting, juicy and delicious. July.

✓ **SATSUMA** (Blood Plum)—Japanese variety; quite popular; large, dark red from skin to pit, which is small, firm and juicy; tree productive. Early July.

Prinlew — New Plum

A valuable new variety, produced by H. A. Lewis. A heavy and sure cropper. Plums of large size; skin yellow, overspread with bright red when fully ripe; a handsome looking plum and the rich, golden flesh is firm, but juicy; fine grained and most delicious of all, either raw or cooked. It's good as a peach. Stands handling and shipping well. Ripe in August. If you only have room for one plum, plant a Prinlew. Each \$1.00; doz. \$8.50; selected trees \$1.25.

RAISE YOUR OWN FRUIT—Every owner of a home should set out fruit trees and berries. Don't delay, start this year.

PEARS

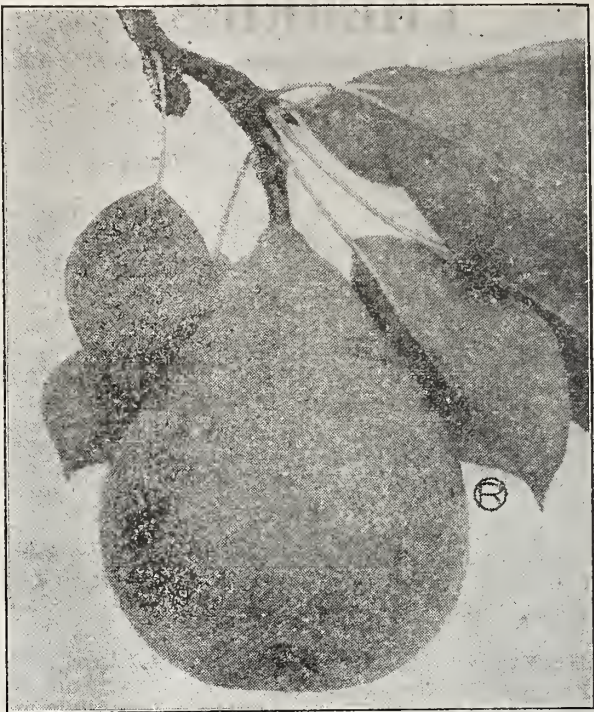
Unless otherwise priced	Each	Per 10	100
1 year, 3 to 4 feet....	\$.60	\$5.50	\$50.00
1 year, 4 to 6 feet....	.75	7.00	60.00
Selected	1.00		

Write for low prices per 1000.

- ✓ **BARTLETT**—Large, skin thin, clear, lemon yellow, with soft blush on the sunny side; flesh white, buttery, very juicy and highly flavored; the best summer pear in existence.
- ✓ **BEURRE BOSC**—Handsome deep yellow, slightly russet; high quality, tender, aromatic. September.
- ✓ **FALL BUTTER**—Favorite fall pear; yellow, smooth and juicy. September.
- ✓ **SECKEL**—Rich and highly flavored; its highly concentrated, spicy, honey flavor is unequalled; skin brownish green, russet brown cheek; flesh whitish. September.
- ✓ **BEURRE CLAIRGEAU**—Large, yellow, shaded with orange and crimson; covered with russet dots; flesh yellowish, buttery, juicy. October-November.
- ✓ **BEURRE D'ANJOU**—A large, fine pear; buttery and melting, with sprightly, vinous flavor; tree a fine grower and good bearer; one of the very best. October.
- ✓ **COMICE**—A splendid commercial variety, being of fine size; good appearance; ships well; yellow, faintly blushed crimson. October.
- ✓ **WINTER BARTLETT**—Originated in Eugene, Ore. Fruit large, closely resembling the famous Bartlett in shape and appearance, but ripening considerably later; tender, juicy and melting and with a most pleasing flavor.



Italian



Bartlett

- ✓ **FLEMISH BEAUTY**—Large, juicy, rich, very hardy, productive and profitable. September-October.
- ✓ **WINTER NELLIS**—Medium; skin yellowish green, dotted with gray russet; flesh yellowish white; fine grained and abounding with juice of a rich saccharine, aromatic flavor; especially adapted to this valley, producing large crops every year; an excellent shipper and good keeper. November-December.

PRUNES

Unless otherwise priced	Each	Per 10	100
1 year, 3 to 4 feet....	\$.40	\$3.00	\$25.00
1 year, 4 to 6 feet....	.50	4.00	35.00
Selected .....	.75		

Write for our low prices per 100 or 1,000 on Italians only.

- ✓ **GIANT**—New; of immense size; dark crimson, on yellow ground; good yielder; flesh firm, rich, sweet, delicious; good shipper.
- ✓ **HUNGARIAN**—Very large, dark red; juicy and sweet.
- ✓ **PETITE (French)**—Small size, egg-shaped; violet purple; sweet, rich and sugary; very productive; good for drying.
- ✓ **SILVER**—Seedling of the Coe's Golden Drop; excellent for drying or canning. September.
- ✓ **SUGAR**—Vigorous grower; fruit large and dries quickly; flesh tender and rich in sugar; color dark purple. August.
- ✓ **ITALIAN (Fallenberg)**—Medium, oval, tapering at both ends; dark purple; flesh greenish yellow; separates freely from the stone; best for drying. Most popular.

NOTE—ITALIAN PRUNES—WE ARE ABLE TO QUOTE MIGHTY LOW PRICES ON ITALIAN PRUNES IF YOU WANT TO BUY IN QUANTITY. A-NO. 1 STOCK, TOO.—WRITE.

APRICOTS

Unless otherwise priced	Each	Per 10	100
1 year, 4 to 5 feet....	\$.60	\$5.00	\$45.00
1 year, 3 to 4 feet....	.50	4.50	40.00
Selected .....	.75		

✓ **MOORPARK**—Very large, yellowish-green; brownish red on the sunny side; flesh bright orange; fine for canning and drying; free-stone.

LEWIS—One of the largest apricots known; handsome in appearance; flavor excellent. If you have room for only one apricot tree, plant the Lewis.

ROYAL—TILTON—BLENHEIM—Rich and juicy.

CURRENTS

Low prices by the thousand.

Unless otherwise priced	Each	12	100	1,000
One year old.....	\$.25	\$2.50	\$15.00	\$100.00
Two year old.....	.40	3.40		

BLACK NAPLES—Very large, black; valuable for jams and jellies.

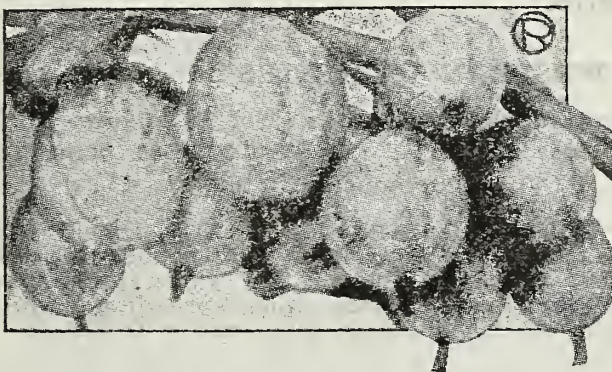
CHERRY—Large, deep red; rather acid; fine for preserving; valuable market variety.

FAY'S PROLIFIC—A new Currant, larger than the Cherry; has less acid, and is more prolific.

WHITE TRANSPARENT—Large; valuable for the table and market; the finest of the white sorts.

PERFECTION—New; a late introduction of great merit. Our grower says: “You cannot say too much about the good qualities of this grand new sort.” So, whether you plant ten or a hundred, plant a good proportion of Perfection, which is the largest, most productive, finest-flavored, rich, mild, sub-acid. Fruit bright red; plenty of pulp; few seeds.

BY PARCEL POST.—Gooseberries and Currants: Add 10c per single bush, 50c per doz. to cover postage and careful packing.



Oregon Champion

The Garden Guide—New

Tells all about planting, pruning and the care of small fruits and vegetables. The best book of its kind we have seen. Price, paper cover, \$1.10; cloth, \$1.65, prepaid.

DEWBERRY

✓ **LUCRETIA**—Fruit ripens between the raspberry and blackberry. Berries large, handsome, sweet and luscious; trailing vines. **STRONG PLANTS**, each 25c; per doz. \$2.50; 100 \$12.50; 1,000, price on request.

QUINCE

1 year old .....	.75c each
2 year old, branched.....	\$1.00 each

✓ **CHAMPION**—Large, yellow; flesh cooks very tender; flavor is most delicious; more productive than the orange, ripening two weeks later.

✓ **PINEAPPLE**—The fruit in form and size resembles the Orange Quince, but is smoother and more globular. Makes a superior jelly. Can be eaten raw, and is said to cook as tender in five minutes as the best cooking apple, possessing a most exquisite and delicious flavor, not equaled by any other quince. September.



GOOSEBERRIES

Unless otherwise priced	Each	12	100	1000
1 year old	\$.25	\$2.50	\$15.00	\$100.00
Two year old..	.40	4.00	25.00	

✓ **OREGON CHAMPION**—Berries large, round and pale green; fine for table use and pies; hardy, strong and a very prolific bearer; most popular and best commercial variety. Low prices by the thousand. Write.

✓ **RED JACKET (Josselyn)**—Of large size, smooth, prolific and hardy; of best quality; a wonderful cropper, with bright, clean, healthy foliage.

BURBANK'S PHENOMENAL BERRY

✓ A most desirable, refreshing berry for the home garden. Of a bright crimson raspberry color; very productive, and most delicious of all berries for pies, canning, jellies or jams. Sweeter than the Loganberry and fine as a fresh table fruit. Prices, same as Logans, next page.

FERTILIZE the ground and **SPRAY** the fruit if you want a large, profitable, satisfactory crop. See Fertilizers, pages 38-39.

SELECTED
STRAINS

STRAWBERRY PLANTS

NONE
BETTER

Our strawberries are carefully grown, trimmed and packed in the best manner to insure their arrival in good, fresh condition. If you want good, strong, healthy, vigorous plants, and true to name, send to us. Our prices are right; our plants are O. K.



"Wellington Marvel," a New Strawberry of Great Merit

WELLINGTON MARVEL

This new variety was originated by Wellington S. Butler, of Merlin, Ore., a strawberry specialist. We have had the exclusive sale and pleasure of introducing this really superb and meritorious variety. In all our experience and observation, we have never seen the equal of the "Marvel" in color, shape, flavor and good qualities. The ripe berries command instant attention on account of the bright, fresh, delightful appearance and fragrance.

The plant has a multiple crown system, which, under restriction, stools up to mammoth proportions and circles itself with a massive wreath of large, crimson berries, sparkling like rubies in the sunlight.

Wellington's Marvel is almost frost-proof. Frosts that have ruined other varieties have not harmed the Marvel. The foliage is heavy

and spreading, and each fruit-stalk of blossoms or fruit seems to be perfectly covered and protected. Fruiting season is very early, long and marvelously productive.

The ruddy glow of the Marvel spreads evenly and leaves no white tips. It is unequalled for table and excellent for canning. Heat does not impair its quality, but intensifies the color to deep red. The flavor of the Marvel is distinct and, when once tasted, strawberry lovers will pay a premium for it. For private trade it is a wonder, as the flavor when fully ripe is incomparably delicious and sweet. For fruit juices, light wine or preserves the Marvel will demand the "top" prices.

Prices, postpaid, doz. 60c; 100 \$3.00. NOT PREPAID, per 100 \$2.50; 500 \$12.00; 1,000 \$20.00.

STANDARD AND POPULAR WESTERN VARIETIES

PRICE LIST.—Your choice of following varieties, PREPAID, doz. 35c; 50 plants, \$1.00; 100, \$1.75. NOT PREPAID, doz. 30c; 50 plants, 75c; 100, \$1.25; 1,000, \$10.00; 500 plants all one kind at 1,000 rate. Ask for special prices in 3, 5, 10 or 25 thousand lots.

OREGON IMPROVED—One of the finest and most satisfactory strawberries ever introduced. It always looks bright, fresh and attractive. The berry is very large, firm and handsome; rich, dark red, extending to the center. The flavor is rich, sweet and delicious. For table use and canning it cannot be surpassed. The "Oregon" ripens early and continues in bearing until late in the season.

MARSHALL—One of our best Western varieties and very popular wherever known. Marshall is one of the blood-red varieties that never fails to attract the eye and to satisfy the taste. It is deliciously sweet, generously prolific, and is in every way an ideal variety for extensive planting or home garden. Excellent for canning, as it holds its color, shape and flavor.

MAGOON—Berry large, fine and excellent; sub-acid flavor; bears heavily and throughout the season.

GOLD DOLLAR—One of the earliest berries on the market. Fruit good, medium size, and attractive; rather tart; fine flavor; foliage heavy, large and spreading, which protects the blooms from early frosts.

CLARK'S SEEDLING—The berry that has made Hood River famous; excellent shipper; berries large, firm and of delicious flavor; vines bear large crops; is especially adapted to the Pacific Coast.

ETTERSBERG—A new late variety. A great favorite in some sections among shippers and canners. We can supply most any quantity this season.

WILSON—A heavy bearer of fine, moderate-sized berries; sharp acid flavor. Many prefer this sort for canning.

Don't use plants from old berry fields. Buy our healthy, vigorous, properly grown plants.

CERTIFIED—All our plants are inspected and certified free of "Strawberry weevil" before digging. Be careful where you get strawberry plants from now on.

THE NEW EVERBEARING STRAWBERRIES

This "new class" of strawberries is becoming more popular each year. Their long fruiting season and the grower's ability to secure berries when the market is high is their real value. Left alone they will flower and fruit the whole season, but to secure a large crop in the late fall keep the blooms off until the last of June. If cultivated, watered and the runners kept off, new plants will produce berries abundantly three months after planting and continue until fall, and the following season give a wonderful crop. Read "Hints on Planting and Care" of everbearers.

PROGRESSIVE EVERBEARING

Progressive is a strong, upright grower, deep rooter and great drought resister. Berries are medium large, rather dark-red in color and of excellent quality. Ripens early and continuously; the fall crop is always profitable. Extremely hardy, bearing until the ground freezes. A valuable market variety, probably the most popular in the class.

Your choice, doz. 60c; 25 plants, \$1.00; 100, \$3.00, prepaid. Not prepaid, \$2.50 per 100; \$20.00 per 1,000. Write for special prices in quantity.

NEW GIANT 999

Description—The originator of this superb new everbearer writes us as follows:

"After ten years of breeding of the new race of Everbearing Strawberries, we have succeeded in originating a new variety that is far ahead of the older sorts in every way.

"The Giant No. 999 plants are strong and sturdy and with the peculiar bluish-green cast to the leaves that makes them the most heat and drought resistant of any strawberry we have ever grown. The root system is immense, going down into the ground to a depth of 12 to 15 inches, thus getting them down into the moist subsoil, enabling the plants to go right on bearing big crops of berries during the hot, dry summer months. The berries are extra large in size. They have a flavor and a fragrance that is different from any other berry." It's a heavy bearer, a good canning berry and makes delicious jelly and jam, and it holds its bright, clear, rosy pink color.

Prices, postpaid: 3 for 35c; doz. \$1.00; 25 for \$1.50; 100 for \$5.00.

Inspected Strawberry Plants

Quarantine No. 8—Oregon State Board of Horticulture prohibits the sale, barter, transfer or distribution of Strawberry plants until said plants are inspected in the growing beds and found free of root weevil. All others should be destroyed.

WE OFFER ONLY INSPECTED and CERTIFIED PLANTS CARRYING PROPER "INSPECTION NOTICE."

SUPERB EVERBEARING

Superb grows low and spreading. The berries are produced beneath the foliage, which protects them from frost and bad weather conditions. Some claim Superb is not so productive as Progressive, but its berries are larger, brighter red in color and of more delicious flavor. Good keepers and shippers, and demand the "top" or fancy prices.

Hints on Planting and Care of Everbearing Strawberries

There is no mystery about these new everbearing plants and it is just as natural for them to grow and fruit all summer and fall as it is for the common varieties not to do so. The plants are set and cared for the same as the ordinary spring varieties. For the largest yield of big berries we like the Hill system the better and especially so where grounds are limited in size. For instance, a rod square bed with plants set 18 inches apart in row and with rows 20 inches apart will take just 110 plants. Pick off all blossom stems as they appear for the first four weeks and also cut off all runner leads as they appear. This causes the mother plant to throw up new crowns, which means more fruit stems and more and more berries.

A good way is to set a new bed about every two years or so, depending on conditions. By setting a new bed each spring, you are sure of having an abundance of fine, big berries.

In order to get a continuous and large crop of large berries all summer long and a big crop in the fall, everbearing plants need water and plenty of it. A thorough sprinkling or irrigation once a week is better than a light watering every day.

A mulch of clean straw, grass or hay between the rows or around the plants during the fruiting season will keep the berries clean and free of dirt and help greatly to preserve the moisture in the ground. Don't forget this.



Three Fruits Stems of "EVERBEARERS," showing blooms, green and ripe berries

BLACKBERRIES

Unless otherwise priced	Each	Doz.	100
One year	\$.20	\$2.00	\$10.00
Extra strong .....	.25	2.50	12.50

BY PARCEL POST—Add 7c each, 50c per doz., extra to cover postage and careful packing, if wanted by mail.

✓ **LAWTON**—The favorite market variety; large, good quality, uniform, hangs long on vine when ripe, productive and profitable. The most generally planted for commercial markets in the Pacific Northwest. Oregon's most popular kind.

✓ **EVERGREEN**—Introduced from Oregon; beautiful lacinated foliage, which it retains all winter; berries long, black, sweet, rich and delicious; ripens from July to November; a fine berry for family use. Low price per 1,000.

✓ **HIMALAYA GIANT**—A rampant grower of a trailing nature; a heavy cropper; the berries are large, juicy, coreless, sweet and firm, with a delicious aromatic flavor. Its deep-rooting qualities enable it to produce a large, firm berry even in a very dry season.

MAMMOTH BLACKBERRY

A rampant grower of trailing habit. Berries large (often 2½ inches long), sweet, juicy and delicious; seeds and core small and soft; enormously productive and early; excellent home berry; too soft to ship well. Same price as Logans.



Lawton Blackberry

Plant a Few of These Delicious, Heavy Producing, Trailing Berries

Fertilize well and trail them on the garden fence or over a trellis.

✓ LOGANBERRY

In great demand again for canning and drying. An exceedingly strong grower and an enormous bearer. Color dark red. Has a pleasant, vinous flavor, delicious and peculiar to this berry alone; fruit ripens early. It is excellent for the table, eaten raw or stewed, and for jelly, jam or "juices" is without an equal.

TRANSPLANTS (2 year, extra strong)—Prices, each 30c; doz. \$3.00 **POSTPAID**. Not prepaid, each 25c; doz. \$2.25; 100 \$12.50.

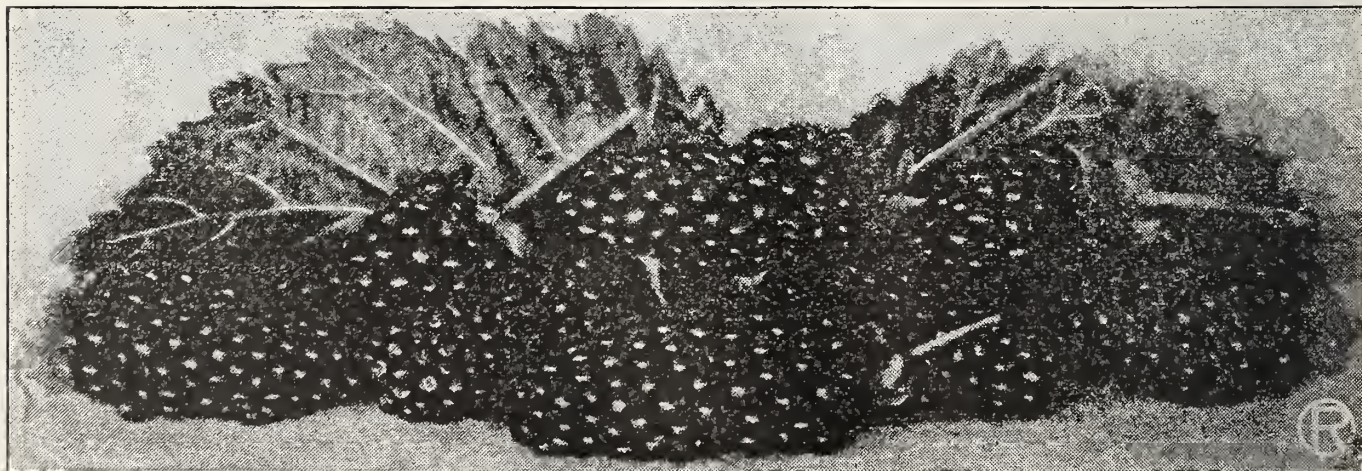
NOTE—Very low prices in quantity.

Tips or 1-year roots give poor results when shipped. We do not like to sell them. They are ready to dig after March 1. Prices on request.

✓ CORY THORNLESS BLACKBERRY

The thornless blackberries are of recent introduction. They have proved to be of great value—all that has been claimed for them. No thorns, thereby easier and quicker picked, more productive, more profitable; of trailing nature.

Will out-yeild and out-class any other blackberry. Larger and sweeter and having a flavor more like the wild berry; superb for jelly, jams, wine or served fresh; small core, almost seedless, firm and will ship well. Yield well the first year and come into full bearing the second after planting. (See cut.) **STRONG PLANTS**, each 30c; doz. \$3.00, postpaid; per 100, \$22.50; low price per 1,000.



Cory Thornless Blackberry (illustration one-half size)—The Coming Variety

NOTE—Our 2-year-old Logan-Phenomenal and Mm. Blackberry plants are transplanted tips grown 1 year in nursery row and all will live. They are cheaper than "tips" at any price. "Tips" will not ship safely.

La France Giant Everbearing Red Raspberry

A new variety of great merit, producing enormous crops of

BIG, RICH, SWEET, JUICY BERRIES
from spring until late fall frosts

Superior to any other. Color rich, deep scarlet, very prolific, heavy cropper, absolutely hardy and free of disease. See back cover.

We have watched the introduction of this berry, have tested it ourselves and secured reports of others who have tried it on the Pacific Coast. We have great faith in La France and advise you to get a good start at once. The plants multiply rapidly after the second year.

La France is a Prize Winner
"No fake." No "unknown quality"

Read the following

AWARDED FIRST-CLASS CERTIFICATES by New York, Massachusetts, Tarrytown, Nassau County, Morris County, Westchester and Fairfield Horticultural Societies, New York Florists' Club, American Institute of New York. Also

AWARDED SILVER MEDALS by New York, Tarrytown and Connecticut Horticultural Societies.

GENERAL DESCRIPTION.—LA FRANCE is a rapid, vigorous grower, canes strong and erect, with fewer thorns than most kinds. The canes branch freely, adding greatly to its productiveness. The berries are firm, twice the size of most; beautiful color, fragrant and delicious in flavor all season long.

The fruit is borne on racemes, one to three feet long, in large clusters, and the same racemes show the unusual sight of buds, blooms, fruit just setting, green berries and the ripened fruit. This condition continues throughout the entire season. The late crops, when raspberries are scarce and high in price, is heavier than the earlier ones.

LA FRANCE is all "meat"; all "berry", not "all seeds". Every "drupe" contains a seed, but the "drupes" of the La France are from two to three times the size of others, therefore it contains fewer seeds than any other variety.

Where the **LA FRANCE** is well established (about 3 years old), it produces enormously from early June to November and later, until heavy frosts kill all vegetation.

While the **LA FRANCE** is a giant in size and a rich, juicy fruit, it has proven to be a good shipper; 24 to 36 hours under ordinary conditions and up to 4 days under pre-cooled conditions, is one report we have.

PLANTING AND CARE.—Plant carefully in rich, deep soil, cutting the tops down to 4 to 6 inches. Cultivate or hoe quite often and supply moisture when possible. Raspberries will repay for good care, plenty of moisture and the right fertilizer. Keep plants damp until ready to plant, if very dry upon arrival soak in water for a few hours.

LOW PRICES FOR 1922

The first La France sold at \$2.00, last year at \$1.50. This season we are able, by special arrangement with the introducer, to sell at \$1.00 per plant; 3 for \$2.50; 12 for \$8.00; 100 for \$60.00. You can afford to plant liberally at these prices. Order early.

See colored photographs outside back cover.



NOTE.—Beware of untrue stock. We offer the genuine **LA FRANCE** from the introducer, who has given us exclusive sales agency for Oregon.

RASPBERRIES

Standard Red Varieties

	Each	12	100
One year	\$.10	\$.75	\$3.00
Extra strong .....	.15	1.00	4.00

Very low prices per 100. Write.

BY PARCEL POST.—Add 5c each, 35c a doz., extra to cover packing and postage.

✓ **CUTHBERT**—Berries very large, deep rich crimson; good for shipping; the most popular of all commercial sorts of raspberries; stands the sun and heat well; flavor rich, sweet and delicious; mid-season. Very low prices per 1,000. Write.

✓ **ST. REGIS**—Medium size and said to be a continuous bearer. Early and late.

✓ **MARLBORO**—Very large and earlier than Cuthbert; beautiful, bright scarlet; good quality; hardy and productive.

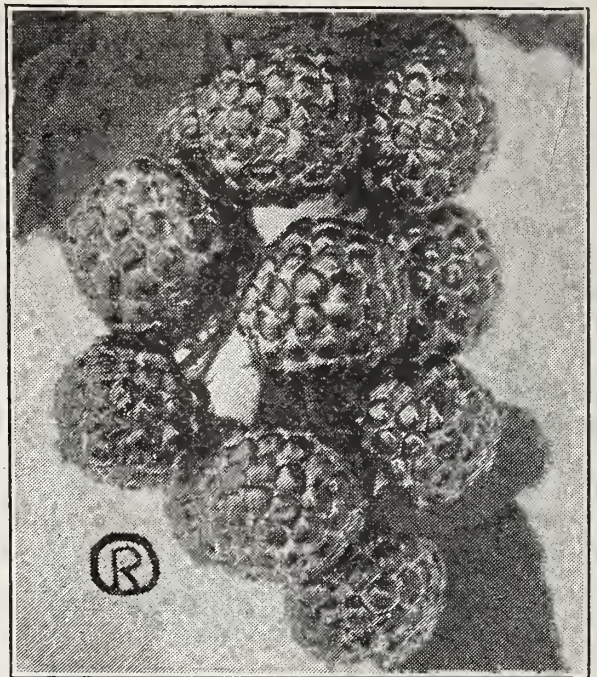
✓ **GOLDEN QUEEN**—A handsome yellow fruited raspberry; excellent quality.

Blackcap Raspberries

	Each	12	100
Two year, select	\$.20	\$2.00	\$10.00

BY PARCEL POST.—Add 7c each, 50c a doz., extra to cover packing and postage.

Low prices per 1,000. Tips in the spring after March 15, in not less than 250 lots only. Price on request.



✓ **PLUM FARMER**—Excellent, very productive; early; the berries are thick-meated, large, fine flavor and very attractive.

✓ **GREGG**—A standard and well-known market sort; very productive, large size, firm, meaty berries, covered with heavy bloom.

✓ **KANSAS**—Strong, vigorous grower, early and productive. Berries of good size and color; firm and of best quality.

✓ **CUMBERLAND**—Very large; mid-season.

Two Up-to-Date Books of Great Value

HOME FRUIT GROWER

By M. G. Kains. A simple and practical volume for the amateur, who seeks to grow high quality fruits for home needs. Nicely illustrated. 213 pages. Prices: Paper covered, \$1.10; cloth, \$1.65.

COMMERCIAL PLANT PROPAGATION

A new and up-to-date book so fully illustrated and plainly written that the professional as well as the amateur will find it of great value. Cloth, 180 pages, \$1.90, post-paid.

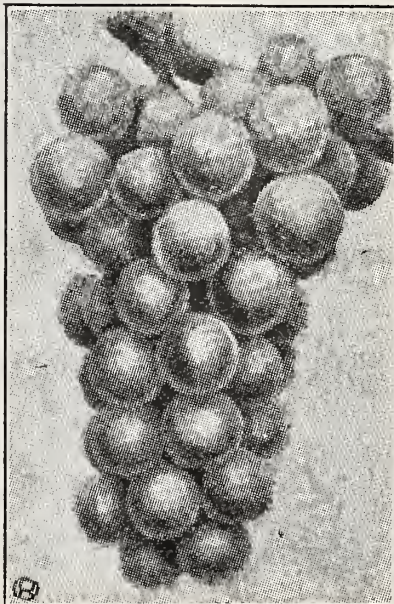
GRAPES

	Each	12	100
One year old	\$.30	\$3.00	\$20.00
Two year old .....	.35	3.50	25.00

✓ **CAMPBELL'S EARLY**.—Clusters large; berries large, round, black, with purplish bloom; flesh firm, but tender; flavor rich, sweet and slightly vinous. Early.

✓ **CONCORD**.—Large, round, black grape; bunches compact, quality only fair, but it is well known and very popular.

✓ **DELAWARE**.—Best known of our native grapes; grows freely and is perfectly hardy; ripens early; berries small, light red; sweet.



✓ **EATON**.—A strong, sturdy grower; fruit is large and handsome, firm and of the highest quality; deep rich red when fully ripe; of sprightly, exquisite flavor.

✓ **NIAGARA**.—Berry large, pale greenish yellow; flesh tender and sweet; productive; the standard white grape in most sections.

✓ **WORDEN**.—Bunch very large and compact; berry large, black; an improved Concord; earlier and excellent home variety.

OTHER GRAPES—We list most popular hardy sorts for general use, but can supply Isabella, Catawba, Flaming Tokay, Muscat, Black Hamburg and others at prices above.

Why Not Raise Some Asparagus and Rhubarb?

Every garden, large or small, should have at least a small supply. If you want special information on culture of these roots, we have **ASPARAGUS CULTURE**, by Hexamer, 174 pages, \$1.25, and **NEW RHUBARB CULTURE**, by Morse and Fiske, 130 pages, \$1.25.

Buy
Roots
and save
2 to 3
years'
time

ASPARAGUS ROOTS**Buy Roots and Save 2 to 3 Years**

One of the earliest and finest of spring vegetables; very easily grown. A bed once planted is good for years if properly attended to and well manured. Set plants 18 inches apart, in rows 3 feet apart.

ONE YEAR OLD.—Prepaid, doz. 35c; 50 75c; 100 \$1.25. Not prepaid, doz. 30c; 100 \$1.00; 1,000 \$8.00.

TWO YEAR OLD.—Prepaid, doz. 60c; 50 \$1.25; 100 \$2.00. Not prepaid, doz. 50c; 100 \$1.50; 1,000 \$10.00.

THREE YEAR OLD, SELECT.—Grown especially for our private trade; large and strong for quick crop. Prepaid, doz. \$1.00; 50 \$2.50; 100 \$3.50. Not prepaid, doz. 85c; 50 \$2.00; 100 \$3.00; 500 \$10.00.

HOP ROOTS**Oregon's Famous English Cluster Hops.**

Regular Root Cuttings, 10c each, 3 for 25c; 75c doz.; \$4.00 per 100, postpaid. Low prices by the 1,000.

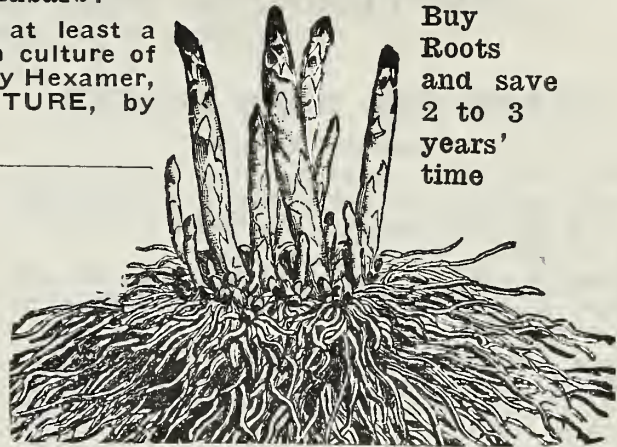
Crown Roots give quicker results; each 15c; 2 for 25c; doz. \$1.25; \$7.50 per 100, postpaid.

HORSERADISH ROOTS

Plant in the spring 18 by 24 inches apart. Set the whole root small end down.

Prices: 2 for 15c; 50c per doz.; \$2.50 per 100. Low prices by the 1,000.

Crown Root.—Quick results. 15c each; doz. \$1.25.

**RHUBARB****PIE PLANT — WINE PLANT**

Plant in the fall or early spring from 3 to 4 feet apart, in the richest soil you have, or can prepare. New book: "Rhubarb Culture," a complete guide to dark forcing and field culture (well illustrated), 130 pages, \$1.25.

Banwine Rhubarb—A Moneymaker

This comparatively new and very profitable rhubarb is claimed by our grower to be superior to all ordinary varieties and unequalled by any known marketable sort. The trueness of the strain is unquestionable, as it is only propagated from root diversions or growing buds from stock that shows the superior merits of the parent stock.

Banwine is a quick, very early grower, producing very freely giant, heavy stalks, that are exceedingly tender, brittle and of the finest flavor and color. A "peerless" rhubarb for home gardens or for commercial plantings.

We supply strong, healthy divided roots, the only safe way. Seedlings do not come true.

SINGLE EYE.—Postpaid, each 20c; doz. \$2.00. Not postpaid, doz. \$1.75; 100 \$11.00.

DOUBLE EYE.—Postpaid, each 25c; doz. \$2.50. Not postpaid, each 20c; doz. \$2.00; 100 \$16.00.

Transplants.—Grown one year from single-eye large, vigorous, healthy roots, each 50c; doz. \$4.00, not prepaid.

FOUR EYE.—Big clump, each 60c; doz. \$6.00.

RIVERSIDE GIANT—Same prices as above.

Victoria Mammoth

A standard and popular variety, large and of excellent quality. We offer a select strain. Beware of seedlings.

One Year—Each 12½c; doz. \$1.25, postpaid. Not prepaid, each 10c; doz. \$1.00; 100 \$7.50.

Two Year—Each 15c; doz. \$1.50, postpaid. Not prepaid, each 12½c; doz. \$1.25; 100 \$10.00.

Rhubarb.—If wanted in larger quantities, write for special price.

COW MANURE.—It is troublesome, disagreeable and expensive for the city gardener to get it. We offer "C-M," THE REAL PRODUCT, in most convenient form, free from weeds. YOU NEED THIS AND ALSO "WONDER," page 45, FOR YOUR ASPARAGUS AND RHUBARB.

Miscellaneous Supplies and Tools You Need

Remember to add postage if wanted by mail

PLANT AND ROSE STAKES

Prices Not Prepaid

ROSE STAKES—Painted green, white top; last and look well. Per doz. 3 ft. \$1.00; 3½ ft. \$1.25; 4 ft. \$1.50; 5 ft. \$2.00; 6 ft. \$2.75; 8 ft. \$4.00.

BAMBOO—Inexpensive and very desirable for pole beans, etc., or flowering plants or shrubs.

Prices per dozen: 2 ft. 25c; 3 ft. 30c; 4 ft. 40c; 5 ft. 50c; 6 ft. 60c; 25 per cent less for pencil size green. Write for low price by 100 or 1,000.

Note.—State for what purpose you want them, as we have them stained green, pencil thickness, and natural color, ⅜ to ⅞ inch thick.

WOODEN LABELS

The tree and pot labels we offer below are strictly No. 1 labels, smooth and well made. The painted labels are "really painted," not dipped in oil. Ordinary lead pencil writing on the painted labels is always readable; it will not wash off.

Tree Labels

P. P. Wgt.	4 lbs.	25	100	M
Painted, copper wired	\$0.25	\$0.50	\$3.50
Unpainted, iron wired20	.40	2.50

Pot Labels

Wgt. per M.	25	100	M
Painted, 4 in. (P. P. 3½ lbs.)	\$0.20	\$0.40	\$2.50
Painted, 5 in. (P. P. 4½ lbs.)	.25	.45	3.00
Painted, 6 in. (P. P. 5 lbs.)	.30	.50	3.75

Garden Labels

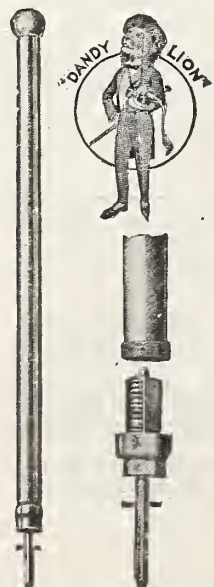
Same style as above, but thicker and wider.

Wgt. per M.	25	100	M
Painted, 8 in. (P. P. 15 lbs.)	\$0.50	\$1.00	\$ 8.00
Painted, 9 in. (P. P. 17 lbs.)	.65	1.50	12.00
Painted, 10 in. (P. P. 20 lbs.)	.75	2.00	14.00

DANDELION AND WEED KILLER

A new, simple, yet practical tool that is automatic, quick and sure in its work. Cutting or pulling off the tops of weeds only makes the roots grow more vigorously; digging them out with a knife gives one the backache or lame knees, therefore use the "Dandy-Lion" same as a cane.

You simply fill it with solution of gasoline or weedkiller, put the point on the root crown of the weed, press until the cross bar on the point (see cut), releases the fluid. (Directions tell how.) The solution kills the root and all.



Spring valve and base removable. Length, 34 inches. **PRICE, NO. 1, Brass Covered, \$1.75; postpaid, \$1.85.**

POTS AND SAUCERS



No. 1 No. 2 No. 3 No. 4
Fig. 1—Fern Dish Filler; 2—Bulb Pan; 3—Azalia or Fern Pot; 4—Standard Flower Pot. All styles same prices.

Size	Each	Doz.	Saucers Each
2 inches	.....\$0.03	\$0.25	
2½ inches30	
3 inches35	
3½ inches40	
4 inches50	\$0.05
5 inches85	
6 inches	1.25	.07
7 inches	1.80	
8 inches	3.00	.10
9 inches	5.00	.15
10 inches	7.00	.20
12 inches	12.00	.30
15 inches	20.00	.50

Prices by express or freight. Not mailable.

JARDINIERES, ETC.

We carry in stock a large and complete assortment of the best styles and latest designs. Limited catalog space will not permit us to illustrate and describe them.

RAFFIA

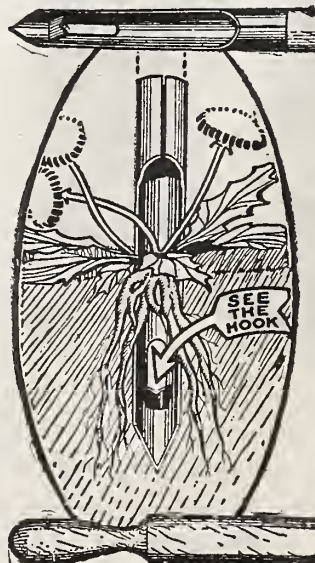
Natural color, highest quality. Very scarce. Price per lb. 40c; 5 lbs. \$3.00; 10 lbs. \$2.50; postage extra. Write for quantity price.

OREGON GREEN MOSS

For hanging baskets, etc. 3 lbs, 25c; 2-bushel sack, \$1.50; per bale, \$4.00. Spagnum moss for packing, \$4.00 per bale.

HALL DANDELION PULLER

Here's a tool that gets the dandelion, roots and all, and operator stands up. No wet knees or aching back.

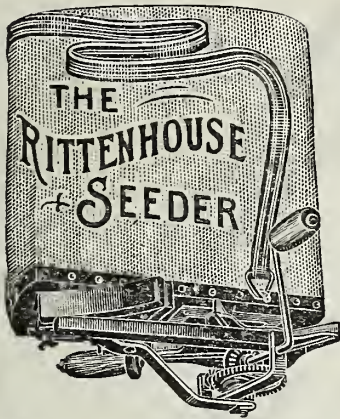


Directions. — Just push the blade down in the ground close to the weed, press towards the weed and pull up. A patent hook near point of blade does the trick. A slot prevents dirt from clogging the hook. Study the illustration carefully. Is made of polished steel and will last a lifetime. The only successful dandelion weeder to date. Wooden handle 30 inches long, steel part 8 inches. Price 75c; postpaid, 85c.

We give the P. P. (Parcel Post) weight so you can add postage if wanted by mail. Don't forget to send it extra.

Miscellaneous Supplies and Tools You Need

Remember to add postage if wanted by mail



RITTENHOUSE or CYCLONE

The best broadcast hand sower in the market. Guaranteed to sow perfectly all varieties of farm seeds, such as clover, timothy, alfalfa, oats, rye, wheat, etc. Can be regulated to sow any amount per acre. It is strongly built and mechanically perfect. The bag holds $\frac{1}{2}$ bushel. Easily operated. (P. P. wgt. 4 lbs.) Price, \$2.50.

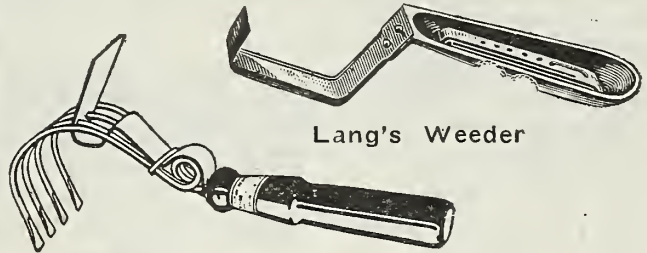


GARDEN TROWELS

Good, reliable, low-priced trowels, 25c to 50c; extra strong and best made, 60c to \$1.00. Mailing charge, 10c extra.

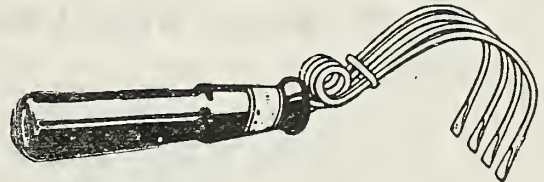
HAND WEEDERS

Several good styles—Diamond, 25c; Beet, hoe style, 20c; Fork, 25c; Excelsior, five-claw, 25c; Lang's, 25c; Magic "A," 15c; Magic "B," like "A," but 18-inch handle, 25c; Magic "C," like "A," but 4 teeth, 35c; Magic "D," see cut, 50c; mailing charge, 10c extra.



Lang's Weeder

Magic "D"

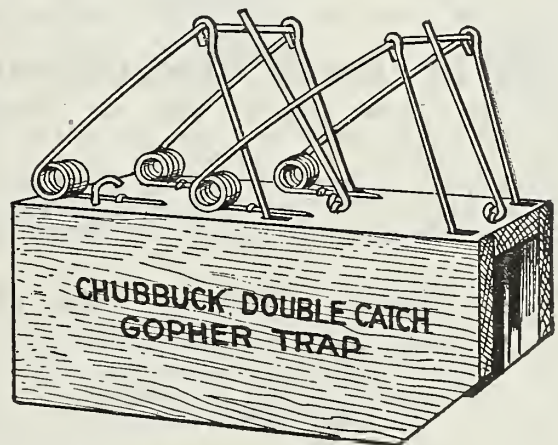


Magic "A"

MOLE AND GOPHER TRAPS

EUREKA CLINCH TRAP.—(See cut.) An inexpensive but efficient wire trap. Easy to set and sure to catch. Set a trap each way in the runway and you catch 'em going or coming. Price 25c, postpaid.

CHUBBUCK DOUBLE CATCH TRAP. — (See cut.) This box trap is to be set in the runway. It has double steel springs that are sure to catch and hold either small or large gophers. Simple, safe and sure. Price 85c; postpaid, 90c.

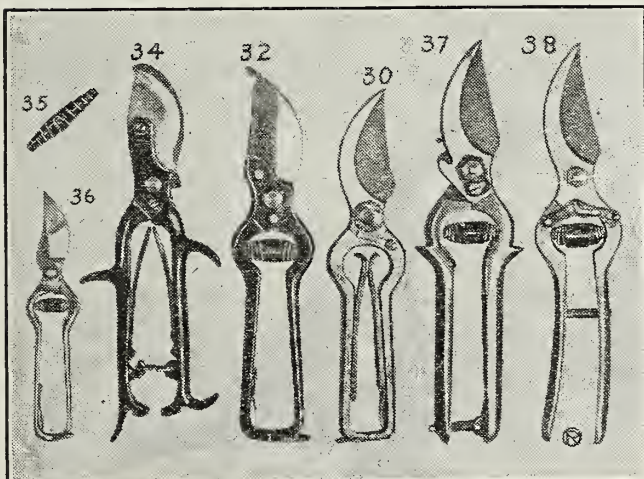


OUT O' SIGHT MOLE TRAP

Very popular. Each \$1.25, postpaid.

HIGH-GRADE PRUNING SHEARS

All prices postpaid



No. 36. Nickel plated 6-inch, fine for cutting roses and light work. \$1.85.

No. 34. Same as illustration, except spiral spring; good, cheap shears. \$1.00.

No. 32. Strong, durable, black handle, polished blade; 8½ inches. Price \$1.50.

No. 32½. Nice finish, half polish, good blade; handles nicely; same style as No. 32; 9 inch. \$1.75.

No. 33. Same style as No. 32, full polish; very strong and serviceable 9 inch. Each, \$2.50.

No. 30. Full polish, double brass springs, lock nut, one extra blade; steel band lock, Swiss style, 8 inch, \$3.50; No. 30, 9 inch, \$3.75. Nos. 37 and 38 not obtainable now.

TREE PRUNERS

Long handle tree pruners indispensable for pruning tall trees.

Reliable make, with spring; 6 feet, \$1.75; 8 feet, \$2.00; 10 feet, \$2.25; 12 feet, \$2.50. Cannot go by mail. Exera blades 60c each, pastpaid.

Wheel Garden Cultivator

Just the right size and the right price for the average garden maker. Everyone who makes much garden should have one, as it reduces the labor one-half. Makes gardening a pleasure.

No. 20. Single Wheel Cultivator

This is the most popular and most efficient large wheel cultivator. By reason of the special patented frame, the attachments always set at the same angle, whether used for deep or shallow work. The bent oak handles may be instantly adjusted to suit the height of operator or to regulate depth for tools to run by loosening one wing nut (wrench not required). The machine runs easily, steadily and in perfect balance on a light, strong, 24-inch steel bushed wheel.

Not equalled by any other cultivator, at anywhere near its price. Attachments are tool steel, hardened and polished.

Tools Furnished.—Plow or mould board for hilling, plowing, covering seed; a combined Cultivator Rake and Sweep for cultivating, harrowing and cutting weeds, etc.; Double Diamond Point for marking seed rows, etc. Weight 18 lbs. (not mailable.) Price complete, \$5.25.

NOTE.—The "Midget Seeder" can be attached to this cultivator.

No. 22. Single Wheel Cultivator

An excellent tool for close, fine work. Has new features not found in others of this class. Equipment, 3 cultivator teeth, 1 plow, 1 pair hoe weeders, all of highest quality steel; wheel 16 inches; weight, boxed, 20 lbs. Price \$8.50.

No. 22A.—Same as above, less the plow. Price \$8.00.

No. G-4B.—Hoe weeders only. Price, \$6.50.

No. 13. Double Wheel Cultivator

With the double wheels you can straddle the plants and work close, fast and accurate. An ideal garden cultivator for small or large acreage. Equipped with 4 cultivator teeth, 2 hoes or weeders, 2 shovels or hillers, 2 leaf guards, all highest quality. Weight, boxed, 40 lbs. Price complete, \$11.00.

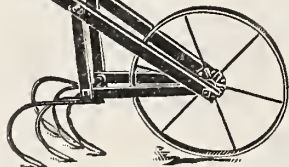
True Temper "Geneva," No. G-2X

This cultivator with its permanent attachments is the latest design in cultivators. It combines three tools in one. No lost attachments or wrenches to look for; a time and labor-saver. Complete for general work. (See cut.) Has five adjustable cultivator teeth, one thin blade scuffle hoe or weeder 9 inches wide and one large mold board turning plow, all of which are permanently attached to a revolving center; 14-inch wheel. Weight, boxed, 22 lbs. Price, \$10.00. **NOTE.**—"Midget Seeder" can be attached to this tool.

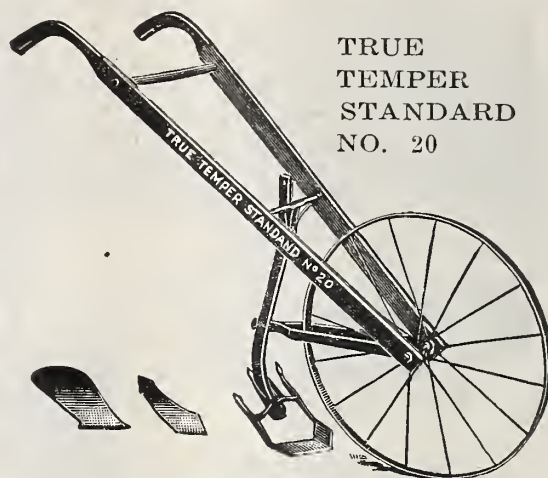
True Temper "Fairy," No. G-5

Makes cultivating a delight. Five adjustable "invincible" teeth, made from tool steel, properly hardened. Can be adjusted to cultivate rows from 6 to 12 inches apart. With "Fairy" you can cultivate as fast as you walk and do it ten times easier than hoeing. Wgt. 13 lbs. Price, \$5.00.

No. G-5—
"Fairy"
True Temper

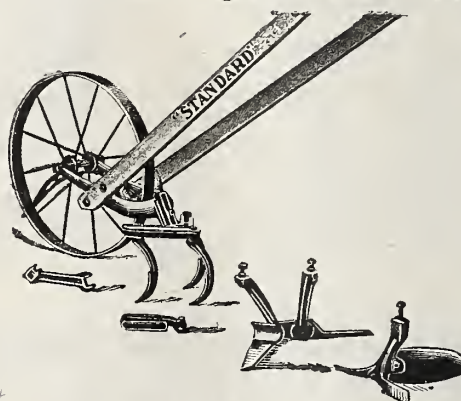


See
Page
113
IT'S
GREAT

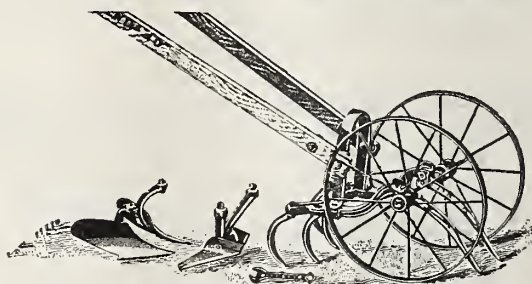


TRUE
TEMPER
STANDARD
NO. 20

No. 20—Single Wheel Cultivator



No. 22—Single Wheel Cultivator



No. 13—Double Wheel Cultivator

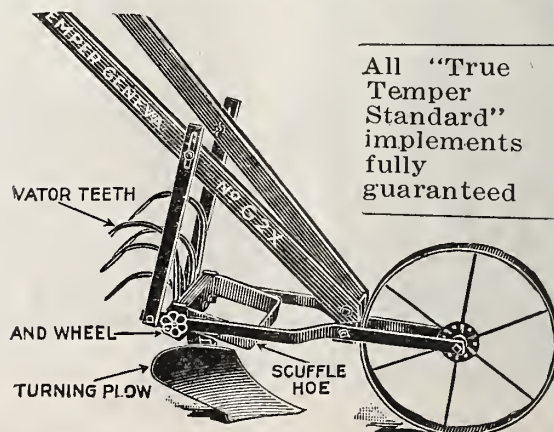
Extra Attachments

Will fit Nos. 9, 12, 13 and 22.

RAKES.—3-tooth 60c; 4 tooth 75c; 5 tooth 90c.

DISC WHEELS—2 sets, 3 wheels each, \$4.50.

PLOW.—Same style as on G-2X, made to fit Nos. 9 or 13. Each, \$1.65.



All "True
Temper
Standard"
implements
fully
guaranteed

No. G-2X—Single Wheel Cultivator

WITH A GARDEN CULTIVATOR YOU CAN CULTIVATE YOUR WHOLE GARDEN IN THE TIME IT WOULD TAKE YOU TO HOE A FEW ROWS.

Standard Hill and Drill Seeders

We offer the following inexpensive, but satisfactory Seeders. We can also supply the Planet Jr. outfits to those who prefer them. Catalog on request.

Standard No. 9 Seeder and Cultivator

This is a combination hill and drill seeder and a single and double wheel cultivator. Fills all the needs of the planter whose work does not justify buying separate tools. Drills the seed perfectly or drops in hills 4, 6, 8, 12 or 24 inches apart; covers and rolls it down.

Cultivator equipment, 4 cultivator teeth, 2 hoes, 2 plows, 2 leaf guards. This outfit is highly recommended. Weight, boxed, 60 lbs. Price complete, \$18.00.

Standard No. 12 Seeder and Cultivator

A little different style, but practically same as above, except it has only 1 wheel; same equipment of tools; quickly changed from a seeder to a single-wheel cultivator; rotary brush feed, and seed drops in plain view. Weight, boxed, 50 lbs. Price, \$16.50.

Standard No. 14 Hill and Drill Seeder

Same as No. 12 above, without cultivator attachments. Weight, boxed, 40 lbs. Price, \$12.50.

Little Midget Seeder

Ideal For the Small Garden

The most popular little Seeder on the market. All metal extremely light and easy to operate; the shoe is adjustable for any depth, the coverer swings free, and does its work nicely.

The Midget will handle accurately almost any kind of garden seed from the smallest up to peas and beans. The hopper holds one pint, yet it will drill out clean a 5c package of seed. Not complicated; adjustments for different seeds easily made, the index on top being used as a guide. Full directions attached to every Midget.

We sell it with or without the wooden handle. You can make a short handle or attach it to No. 20 or No. G2X cultivators.

Prices: No. 1 Midget (without handle), (P. P. wgt. 6 lbs.), Each \$4.25. No. 1H, complete with handle (P. P. wgt. 10 lbs.). Each \$4.75. Add postage if wanted by mail.

PLANET JR. SEEDERS AND CULTIVATORS

FREE.—1922 Planet Junior 72-page Catalog, illustrated, descriptive and up to date, with complete price list, on request. If you happen to know the 1922 price on the implement you want, remit and we will ship from Portland stock; otherwise we'll gladly send 1922 catalog.

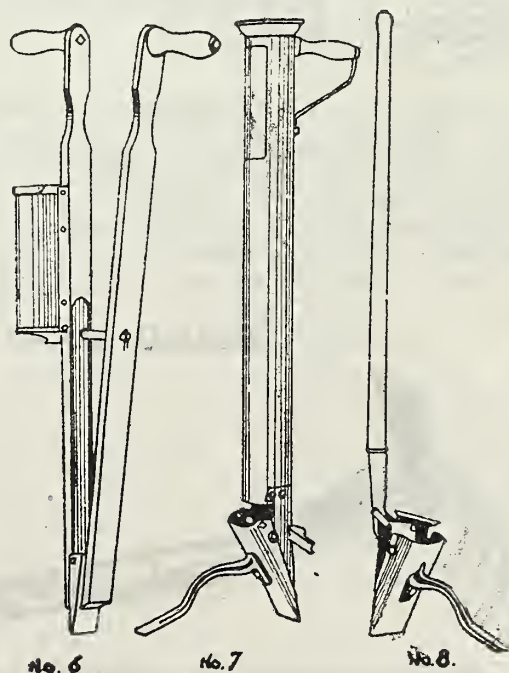
Corn and Potato Planters

Save time, labor and backache. Add postage if wanted by mail

ACME CORN PLANTER.—(See cut No. 6.) A two-handled planter, light and durable. Adjustable from popcorn to large kidney beans. (P. P. wgt. 6 lbs.) Price \$1.50.

EUREKA TUBULAR POTATO PLANTER.—(See cut No. 7.) Plants any size seed, and at an adjustable uniform depth. Opens automatically by forward movement; most satisfactory in every way. (P. P. wgt. 5 lbs.) Price \$2.00.

PINGREE POTATO PLANTER.—(See cut No. 8.) Similar to the tubular, but has no tube. You lift the planter up to drop in the potato. (P. P. wgt. 5 lbs.) Price \$1.35.



These up-to-date Seeders are made by the American Fork and Hoe Co. None better — fully guaranteed.

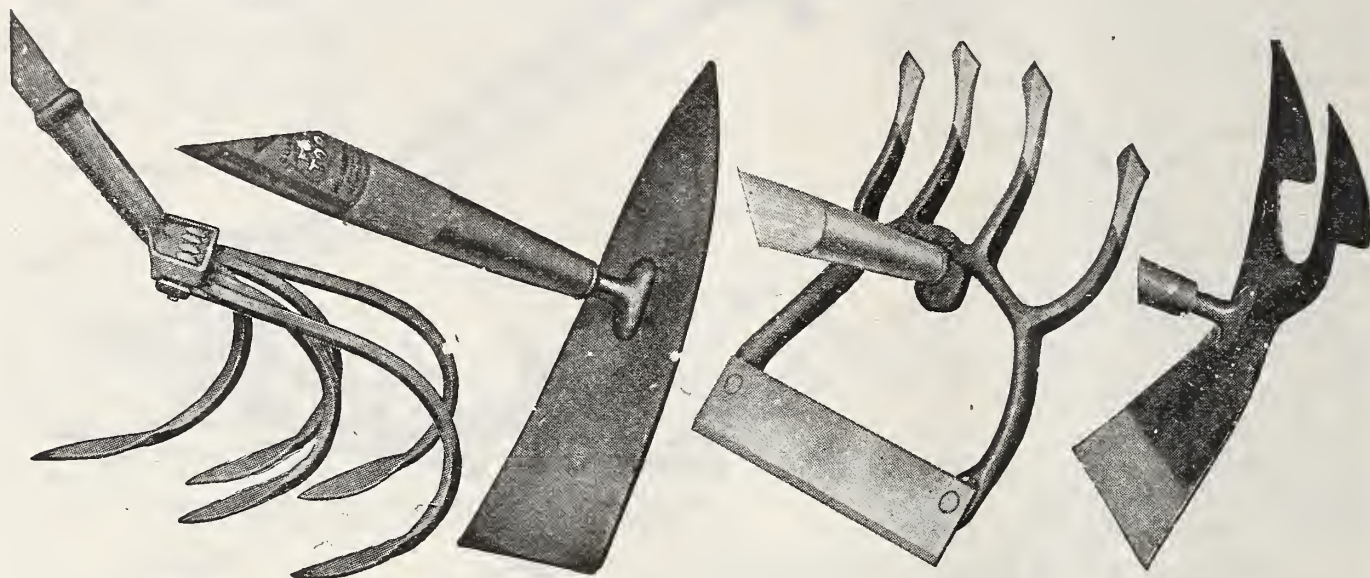
No. 9 Standard Seeder and Cultivator

"Little Midget." Every home gardener can use it.

EXTRAS.—We can supply extra Rakes, Hoes, Plows and Disc Wheel Attachment for No. 13 and No. 22 Cultivators and No. 9 and No. 12 Seeders. Write for prices.

Miscellaneous Tools That Every Gardener Needs

Note.—We give the P. P. (Parcel Post) weights so you can add postage if wanted by mail. Don't forget to send it extra, otherwise we will express them.



Hall's No. 1

No. 5

No. 6

No. 4

HALL'S GARDEN TOOLS

Very popular, handy, light and good

HALL'S NO. 1.—This has 5 adjustable steel spring teeth or cultivators. Spread 7 inches; length 6 inches; height 6 inches; 4-foot handle. (P. P. wgt. 3½ lbs.) Price, \$1.25.

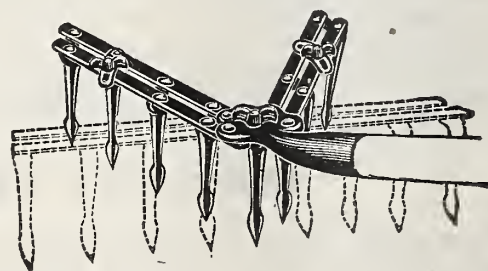
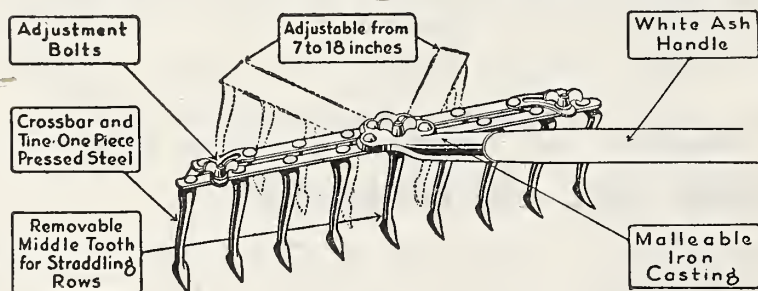
HALL'S NO. 2.—Same as above, only 3 prongs. A smaller and lighter tool for small gardens or narrow rows. (P. P. wgt. 2 lbs.) Price, \$1.00.

HALL'S NO. 4.—A double tool; a square hoe blade 4½ inches wide on one side and 2 cultivator teeth on other end. Full length handle. (P. P. wgt. 2½ lbs.) Price, \$1.00.

HALL'S NO. 5.—A double tool; a square 3-inch hoe tapering to a point on other end. Full length handle. (P. P. wgt. 2½ lbs.) Price, 85c.

HALL'S NO. 6.—A combination tool; a 6-inch hoe blade on one side and a 4-tooth hoe or rake on other end. Full length handle. (P. P. wgt. 4 lbs.) Price, \$1.25.

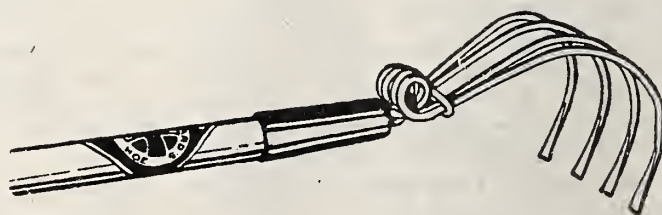
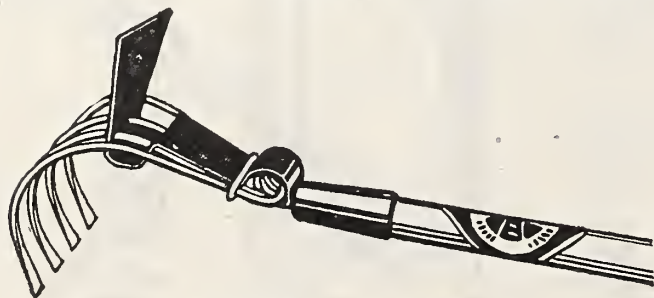
PULL EASY ADJUSTABLE GARDEN TOOL



Study the illustrations above carefully and you will understand the make-up of this new tool. We used them in our gardens last year and were more than pleased. For raking, cultivating, leveling and preparing the soil it has no equal. You can do more and better work with this tool than with any other that we know of. It is adjustable from 6 to 18 inches in width. It is not as heavy as it looks, and the construction of the teeth keeps it in the ground, and you can cultivate between the rows as fast as you can walk. Polished hardwood 4½-foot handle. Try it; if not satisfied, we'll trade.

NO. 1 PULL EASY.—9 teeth (P. P. wgt. 4 lbs.), \$1.75.

MAGIC LONG HANDLE GARDEN TOOLS



MAGIC, STYLE "H," EACH \$1.40; **MAGIC, STYLE "G,"** EACH \$1.25.

STANDARD MAKES OF HOES, RAKES, SPADES, SHOVELS, ETC., ON HAND AT ALL TIMES. CALL OR WRITE IF INTERESTED.

SPRAYS, INSECTICIDES, ETC.

DON'T WAIT until the fungi, such as mildew, rust, black spot, etc., have attacked your roses and trees; the fungicide sprays are merely preventatives and should be used in the fall or early in the spring. After the disease has developed, it may be too late to save the plant.



A Real Root Maggot Remedy

It is not injurious to Plant Life in any way, but on the contrary is a valuable stimulant and fertilizer.

IT INSURES A GOOD CROP OF Radishes, Kale, Cabbage, Onions, Turnips, Cauliflower, Etc.

You can now sow any of these crops and be certain of protection against the destructive Root Maggot, Earth Worm and other pests.

"MAG-O-TITE" ACTS as a preventive by repelling the Fly which lays the egg from which the Maggots are hatched and it also destroys Maggots which are already in the soil.

"MAG-O-TITE" IS APPLIED by simply sprinkling it in and over the drills when seeding, and around the roots when planting. After the plants are up, sprinkle around and alongside of them.

Quantity Required.—A 4-lb. package will cover about 300 feet of drill, mixed with the soil at planting time, with an occasional top dusting as a preventive during the growing period.

For Field Culture the approximate quantity required is from 300 to 500 lbs. per acre.

PRICES OF MAG-O-TITE

Add postage if wanted by mail.
2-lb. pkg. 35c; 4-lb. pkg. 60c; 8-lb. pkg. \$1.00
25-lb. sks. \$2.50; 100-lb. sks. \$8.50
Add postage if wanted by mail.
Descriptive folder on request.

CALCIUM ARSENATE POWDER— KEY-BRAND

For all chewing and leaf-eating insects. It may be used on apples, pears, grapes and shade trees. For most chewing insects use at the rate of 1 to 2 lbs. to each 50 gallons of water with about 2 to 3 lbs. of lime. It may also be used combined with Bordeaux Mixture and Lime and Sulphur Solutions. Prices, ½-lb. pkg. 35c; 1 lb. 65c; 5 lbs. \$3.00.

HELLEBORE—Key-Brand—Powdered

For the destruction of slugs, currant worms, etc. Poisonous to insects but not to human beings, therefore safe to use when fruits or vegetables are nearly ripe. Use as a powder or spray, 1 oz. to 3 gal. of water. Price, ½-lb. 40c; 1 lb. 75c.

POWDER BLOWERS, SIFTERS, etc., page 126.

BUG DEATH

Non-poisonous to Humans, Birds or Animals, but it sure gets all chewing insects on vegetables, plants or trees. The only effective powder that destroys that little black bug or beetle that pesters and destroys tomato, bean and vine plants.

Use it freely on any vegetable—absolutely non-poisonous to humans, but destroys the bugs and prevents blight, revives and aids in production and healthy growth.

Write us about Bug Death for Potatoes if you want wonderful results.

Prices, 1-lb. cans with perforated shaker tops, postpaid, 35c. By express, 1 lb. 30c; 5 lbs. \$1.00; 10 lbs. \$1.75; 25 lbs. and up 16c lb. Add postage if wanted by mail.

BUG DEATH APHIS

Similar to above but fluffier and lighter. It sticks, stays, stimulates and saves. Regular Bug Death forms the basis, but it also contains other ingredients to make it especially effective against aphids, lice and sucking insects on rose bushes, plants or trees. Non-poisonous. An excellent fungicide for mildew and blight.

Prices, 12-oz. cartons 35c, postpaid. Bulk, 3 lbs. 75c; 10 lbs. \$2.30; 25 lbs. up at 20c; postage extra; or by express or freight.

WEED KILLER—Liquid

For Lawn Tennis Courts, Paths, Roadways and any other place where you do not want grass or weeds to grow.

Guaranteed to destroy weeds, grass, poison ivy and all undesirable vegetation. Keeps roadways and paths free from weeds. Cleans tennis courts and ball diamonds. An effective combination of high grade chemicals which diluted in water at 1 to 40 destroys the roots as well as the tops of all vegetation. One gallon diluted will cover 1,000 square feet; and one or two applications are sufficient for an entire season. (Not mailable.) Most effective when ground is damp—use an ordinary sprinkling can.

Price: Qt. 75c gal. \$2.00; 5 gals. \$9.00. Write for price per barrel.

"WOOD-LARK"

Squirrel and Gopher Poison

Guaranteed quick and sure, also very effective on wood rats, mice, etc. Use it so that the chickens or birds will not get it. Prices, by express only: 1-lb. can 50c; 10 lbs. \$4.50; 25 lbs. \$9.25.

TREE TANGLEFOOT

A sticky compound, easily applied in a band around the trunks of trees as a protection against all crawling insects. One pound makes about 10 lineal feet of bands and one application remains sticky 3 months or longer, rain or shine. Apply with a wooden paddle. Excellent to apply over fresh cuts after pruning or trimming. Keeps well.

Prices: 1-lb. can 50c; 5 lbs. \$2.25; 10 lbs. \$4.25; 20 lbs. \$8.00.

Spray material subject to market changes. Write for quantity prices. Poisons not mailable. Add postage if small package of mailable sprays or powders are wanted by mail.

Sprays and Insecticides—Continued

The best and most economical method of spraying is with a hand or power sprayer.

ARSENATE OF LEAD

For spraying trees and shrubs or plants against the attacks of leaf-biting or leaf-eating insects of all kinds, such as green worms, slugs, etc. Especially valuable for spraying to prevent the codling moth on Apple and Pear, and should be used just before the calyx cups close, for eating insects, whenever they appear. Can be combined with other sprays.

SHERWIN-WILLIAMS' DRY POWDERED ARSENATE OF LEAD.—Has many advantages over the paste, easier to mix and requires less, is more efficient on account of its extreme fluffiness and will adhere longer. Does not deteriorate. Use 1 to 2 lbs. to 50 gallons of water. 1 to 2 tablespoonsful to a gallon. (Poison, not mailable.) Full directions on packages.

Price, 1/2-lb. can 40c; 1 lb. 60c; 5 lbs. \$2.50. Quantity price on request.

LIME AND SULPHUR SPRAYS

Particularly effective in the control of the following: San Jose Scale, Oyster Shell, Bark Louse, Scale Insects, Fungus Diseases such as Peach Leaf Curl, Apple and Pear Canker, Apple Scab, Brown Rot of Peach or Plum, Blister Mite, etc.

LIME AND SULPHUR SOLUTION.—The original and old form liquid spray for San Jose Scale. Use 1 part of this liquid to 9 parts of water for dormant spraying. We offer high grade quality. (Not mailable.)

Price, qt. 30c; gal. 75c; 5 gals. \$2.50; 10 gals. \$4.50. Write for price per barrel.

DRY LIME-SULFUR.—Sherwin Williams' high grade dry powder. Overcomes disadvantages of the liquid material such as the possibility of freezing, leaky packages, hauling bulky packages, extra freight, etc. Has all the insecticidal and fungicidal qualities of the liquid material. Is absolutely safe and effective. From 12 to 15 lbs. Dry Powdered Lime-Sulfur dissolved in 50 gallons of water should be used as a dormant spray; from 3 to 4 lbs. to 50 gallons of water in combination with the usual proportion of arsenate of lead should be used for summer spray on all seed fruits such as apples, pears, etc. One-half this amount for peaches, plums, and all stone fruits.

We can mail this—postage extra.

Prices, 1 lb. 35c; 5 lbs. \$1.50; 10 lbs. \$2.50. Write for quantity price.

SCALE DESTROYER

"TARGET BRAND."—A soluble oil spray of decided merit for San Jose Scale, the most effective for leaf roller, all tree infesting scale and most soft bodied sucking insects. Has many advantages over Lime and Sulphur Solution, as it spreads more readily, getting into every little crevice. Will go twice as far. Has no bad odor, does not discolor and much more agreeable to apply as it does not burn the eyes and skin; no clogging of nozzles, mixes easily. Use 1 gallon to 20 of water, after the leaves are off and up to time buds appear. For summer spray use 1 gallon to 100 gallons of water. (Not mailable.)

Price, qt. 75c; gal. \$2.00; 5 gals. \$8.00; 10 gals. \$13.50. Write for price per barrel.

S. W. PESTROY—(Insects)

This combines the insect destroying properties of Arsenate of Lead and the fungus preventative qualities of Bordeaux Mixture. It is put up in dry, powdered form for convenient use, and can be used for either dry dusting or wet spraying. It is safe and efficient. Used as a powder just as it comes from the package, in solution same strength Arsenate of Lead powder.

Price, 1/2 lb. 30c; 1 lb. 50c; 5 lbs. \$2.00.

BORDEAUX MIXTURE

For Blight, Mildew, Rust and Fungus Diseases. Also prevents and cures Black Rot and Scab, and acts as a deterrent for insects on fruits and vegetables.

BORDEAUX MIXTURE—POWDERED.—This is a perfect dry Bordeaux Mixture concentrate in a dry powder. It is scientifically founded to insure perfect results, stays in suspension well and adheres to the foliage. It can be used in combination with other insecticides with an extraordinary degree of safety. For general winter use, 8 lbs. to 50 gallons of water; one-half strength for summer. (Not mailable.)

Price, 1 lb. 50c; 5 lbs. \$2.00; 10 lbs. \$3.50

CUT WORM KILLER—Key-Brand

A very effective poison bait against cut worms, slugs, etc. Place it around plants subject to attack. Worms prefer it to vegetation. Prices: 1 lb. 40c; 5 lbs. \$1.75.

BLACK LEAF "40"

A concentrated solution of nicotine sulphate containing 40 per cent nicotine. Indorsed by the foremost experts of the U. S. for red bug, green and wooly aphids, thrip, plant lice, codling moth, pear, psylla and all sucking insects.

Also an excellent dip for animal parasites, such as scab and lice on sheep and cattle, sheep ticks, etc. (Poison, not mailable.)

Price, 1-oz. bottle 30c; makes 5 gal. spray; 1/2-lb. can \$1.25, makes 47 gals. spray; 2-lb. can, \$3.75, makes 240 gals. spray; 10-lb. can, \$15.50, makes 1,000 gals. spray. Full instructions with each can.

NOTE.—Fish oil soap (see next page), mixed in this solution makes it more effective and is necessary for perfect results. It makes it stick and last longer. Use 4 lbs. to 50 gals. solution. Full and detailed instructions with each can.

NICO-FUME

The purest and most highly refined nicotine product offered for spraying, vaporizing and fumigation in Green Houses. Our Florists like NICO-FUME better than other similar preparations such as Nicotidine, Tobacco-ine, etc., because it is safe and less expensive. Read descriptive pamphlet and be convinced. Free on request.

NICO-FUME LIQUID for spraying or vaporizing; 1/4-lb. tin 75c; 1-lb. tin \$2.35; 4-lb. tin \$8.50; 8 lbs. (gal.) \$16.50. (Cannot mail.)

NICO-FUME FUMIGATING PAPER.—Quick, safe and effective for greenhouse work. Price per can of 24 sheets \$1.35 (wgt. 1 lb.); 144 sheets \$6.00 (wgt. 4 lbs.). Add postage. 288 sheets direct from factory prepaid for \$11.00, guaranteed fresh.

NOTE.—Prices on Sprays, etc., subject to market changes. We are not allowed to mail poisonous sprays or insecticides.

Sprays and Insecticides—Continued

SULPHO-TOBACCO SOAP

For spraying or sponging or dipping ferns, palms or potted plants, or spraying roses, shrubs or vines it is invaluable. Kills Aphids, Red Spider, Plant Lice and Sucking Insects. Acts quickly and effectively against these pests. Will not injure the tenderest plant. Two ounces of soap make a gallon of solution. Non-poisonous, perfectly safe and yet very efficient.

Prices: Postpaid, 3-oz. bar 15c; 8-oz. bar 25c.

PURITAN LIME



A highly refined lime product. Contains no adulterant and may be used with absolute freedom for the following uses: Water softener and purifier, lime water, mouth wash, disinfectant and deodorizer, whitewash, spray and soil conditioner. Descriptive pamphlet gives full information and directions. Sold in sealed packages only.

Price: 1 lb. 20c (P. P. weight 1½ lbs.); 5 lbs. 50c (P. P. weight 6 lbs.) If wanted by mail, add postage.

GRAFTING WAX

We sell Target Brand, a high-grade preparation. Easy to handle. For pruning or grafting or for covering fresh cuts.

¼ lb. 20c; ½ lb. 35c; 1 lb. 60c; postage extra.

PARIS GREEN

Poison, be careful. Usually four to six ounces to fifty gallons of water will be satisfactory. Price, ¼ lb. 25c; ½ lb. 40c; 1 lb. 75c.

FISH OIL SOAP

For aphids, plant lice, etc. Best grade, ½ lb. bar 15c; 1 lb. 25c; 10 lbs. \$2.00; 100 lbs. market price.

RAT CURE

Never fails. It is in tablet form, ready to feed from the can; no mixing. No odor after death. A rat or mouse less for every tablet at a cost of less than one cent.

Price: 30c per can; 4 for \$1.00, postpaid.



TALBOT'S ROACH POWDER

The most effective Roach powder. Pkgs., 30c and 55c, postpaid.

TALBOT'S ANT POWDER

Excellent repellent and destroyer. Pkgs. 30c and 55c, postpaid.

TALBOT'S BED BUG POWDER

Sure to get them. Pkgs. 30c and 55c, postpaid.

PRUNING COMPOUND OR PAINT

This paint has a heavy oil body which dries on the cut with a rubbery, elastic film that will last as long as a paint can be made to last. It will thoroughly seal up the open wound. It is dark olive green in color, comes ready to use with a stiff brush. Its low price and merit should appeal to every orchardist.

Price, qt. 65c; gal. \$2.25

CREOLA—COLD WATER PAINT

An inexpensive white, disinfectant paint. Comes in dry powdered form ready to use when mixed with cold water. Excellent for use in chicken houses, stables, dog kennels, dairies, out houses, etc. Creola can be applied to any solid surface, such as wood, cement, brick, stone, iron, etc., and when dry will be snow white. When properly mixed and applied does not flake or peel off like ordinary whitewashes. Keep the cellar, animals' quarters, etc., white and sanitary with Creola. Full directions on each package.

Price: 1½-lb. pkg. 30c; 5 lbs. 85c; 10 lbs. \$1.50; 25-lb. box \$3.50; 50-lb. box \$6.50; 100-lb. box \$12.50. Descriptive leaflet on request.



UNSLACKED LIME.—For making whitewash, etc.

Price, 5 lbs. 25c; 10 lbs. 40c. Add postage. Barrel prices on request.

SULPHUR POWDER.

Lb. 10c; 3 lbs. 25c; 100 lbs. \$4.00

SULPHUR CANDLES.

Each 10c; postpaid 15c; 3 for 35c

TOBACCO DUST.—Valuable as an insecticide. Lb. 15c; 10 lbs. \$1.25

BLUE STONE-VITROL.

1 lb. 25c; 10 lbs. market price

SUNSET RODENT KILLER GAS BALLS

A new product of real merit to eradicate ground squirrels, prairie dogs, rabbits and pocket gophers. When these gas balls are lighted and rolled down into the burrow they produce a deadly, poisonous gas that carries death to any living rodent in the burrow.

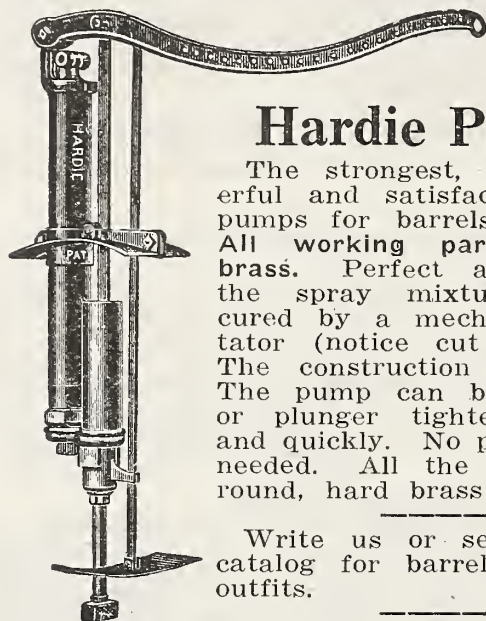
They are non-explosive and non-poisonous to handle. Use one or two balls per burrow. Safe, sure and inexpensive. Descriptive Leaflet and Testimonials on request. Full directions with each order. Prices, 6 for 30c; doz. 50c; 3 doz. \$1.25, postpaid. Carton of 125 balls, \$3.00. Wgt., 14 lbs. Postage extra.

COMET GAS BALLS.—Smaller balls than above, to be used the same way. Pkg. 12, postpaid, 40c.

FREE ADVICE.—If you will write and tell us what insects or plant diseases you want to combat, we will advise you to the best of our ability.

SPRAY PUMPS AND SPRAYERS

Our experience shows us that if you get a good outfit, one large enough to do your work, you will spray well and as often as necessary; but if you get a cheap outfit or one that is too small, you will become disgusted, throw it aside and let this most important work go undone. **HARDIE MFG. CO.'S HANDSOMELY ILLUSTRATED SPRAY PUMP CATALOG ON REQUEST.**



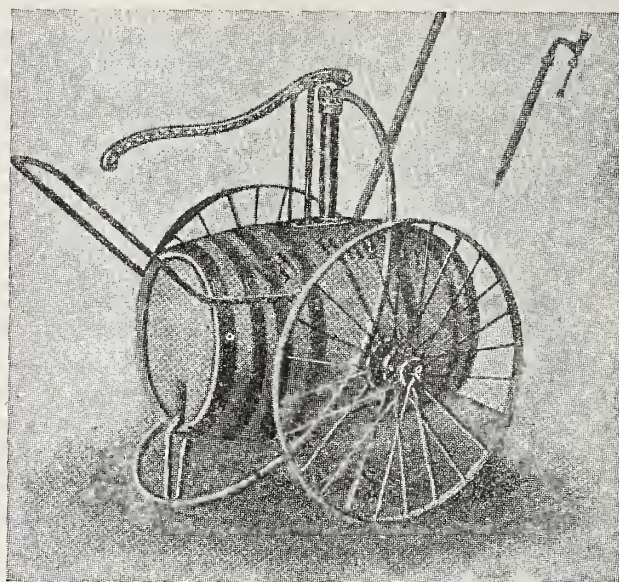
Hardie Pumps

The strongest, most powerful and satisfactory spray pumps for barrels or tanks. All working parts are of brass. Perfect agitation of the spray mixture is secured by a mechanical agitator (notice cut carefully). The construction is simple. The pump can be repacked or plunger tightened easily and quickly. No pipe wrench needed. All the valves are round, hard brass balls.

Write us or see Hardie's catalog for barrel or power outfits.

No. 6 Hardie Catalog

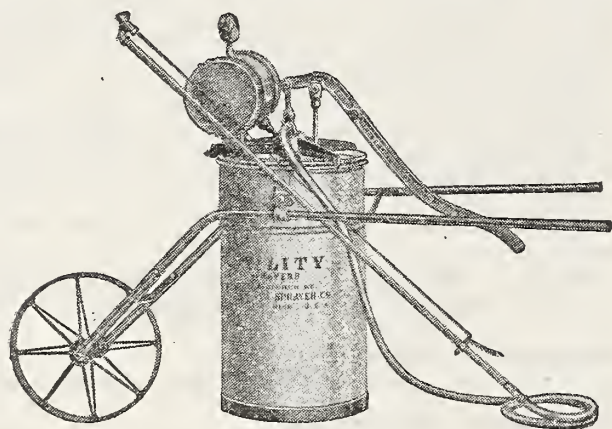
No.	Plunger	Capacity per Hour	Price
No. 5.....	2 in.	50 gal.	\$16.25
No. 6.....	2 in.	75 gal.	20.25
No. 7.....	2½ in.	100 gal.	22.50



Hardie Wheel Outfit No. 21

WHEEL OUTFIT NO. 21

A most satisfactory outfit and one of our best sellers. Especially designed to meet the needs of the small fruitgrower, gardeners and florists, for all-round spraying. It has the capacity and power to do good work rapidly. Dairymen, poultry keepers and farmers will find this outfit most useful for whitewashing, disinfecting and general spraying. The 30-gallon barrel is mounted on strong wrought-iron wheels, 26 inches in diameter, with 1½-inch tires. No. 5 pump, 5 feet best hose and couplings, 8-foot bamboo rod and leakless stopcock. 1 Vermont nozzle. Price \$40.00



No. 40 Utility

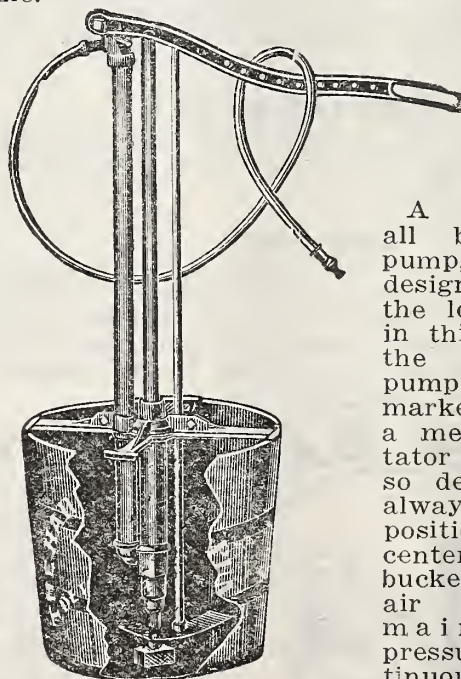
UTILITY NO. 40 SPRAY OUTFIT

A very useful and convenient portable outfit for all-round spraying, whitewashing or disinfecting. Outfit only 28 inches wide, permitting its use in narrow passageways.

Tank, 18-gal. capacity, made of heavy galvanized iron, reinforced at top and bottom. Frame made of steel tubing, well braced, to insure strength and rigidity. Tank when filled hangs in a vertical position and is easily removed. Wheels, 18-inch diameter by 2½-inch face.

The air pressure tank is so constructed that a sufficient pressure may be attained and considerable spraying done with one pumping. Tank is supplied with pressure gauge and drain plug.

Equipment, 10 feet of ½-inch, 5-ply hose, 4 feet spray rod, and No. 65 shut-off, self-cleaning, adjustable nozzle. Weight crated, 100 lbs. Price \$45.00.



HARDIE BUCKET PUMP NO. 10

A high-grade, all brass bucket pump, especially designed to meet the long-felt want in this line. It is the only bucket pump on the market that has a mechanical agitator and that is so designed as to always stand in position in the center of the bucket. Good-sized air chamber to maintain high pressure and continuous spray.

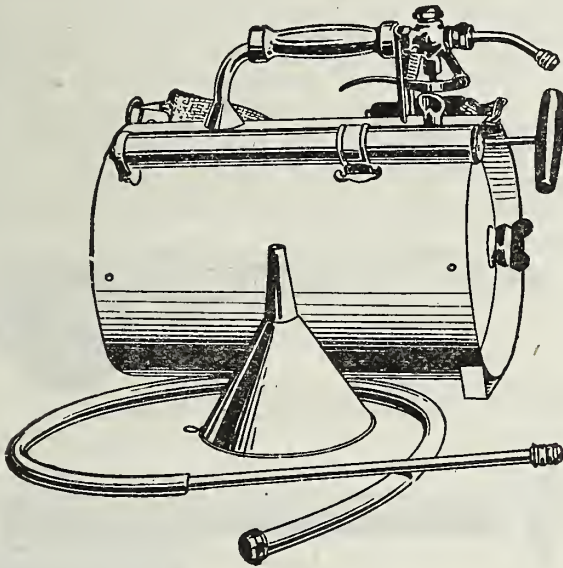
Price, including No. 4 Pump, one 5-gallon heavy wooden bucket, three feet best ½-inch hose, one spraying lance 18 inches long, one Vermorel nozzle, price \$13.50.

To reach the tops of tall trees, you should order, extra, an extension rod. For price of extension rods, see page 127.

LARGER PUMPS.—For larger pumps and power outfits ask for Special Spray Pump Catalog—Free on request.

LOWELL FOUNTAIN SPRAYER

Every city gardener, florist and poultry keeper needs a Lowell Fountain Sprayer; clean and easy to operate; no need to get any spray on your hands or clothes; will last for years with reasonable care.



Lowell Fountain Compressed Air Sprayer

Special Features: Capacity 3 gallons; can be carried by the handle (see cut) or a shoulder strap. The automatic controlling valve under the handle gives instant and perfect control of the spray and don't waste any. The air pressure pump is outside where you can get at it, the filler plug is well made and fits tight. The tank after being seamed and riveted is dipped into molten solder, making it absolutely air tight and the strongest Air Pressure Sprayer made, standing five times the air pressure necessary to operate.

Hose with a 4-inch rod, 2 nozzles and filler funnel, with each outfit. For reaching the under side of leaves of low bushes, use the vine attachment extension rod. For high spraying use as many two-foot extensions as needed. Descriptive booklet on request.

Prices: No. 111 brass tank \$10.50; No. 110 galvanized tank \$7.50. (Wgt. boxed 14 lbs.)

Extras—2-foot brass extension rods, each 75c; vine attachment, 2-foot extension with bent neck, each \$1.00. (P. P. 1 lb.)



Lee's Utility

UTILITY COMPRESSED AIR SPRAYER

This type of sprayer is the most popular for all general work requiring a sprayer. It is adapted for spraying, whitewashing, disinfecting, for the application of glue sizing, etc. Size, 7¼ by 20 inches; capacity, 3½ gallons. Side seam closely riveted and all joints well soldered and tested. Pump cylinder made of brass with bronze ball check valve, which will not deteriorate like rubber; hose, ½-inch, 5 ply, attached to tank by means of a standard hose connection of brass. Filling cap of ample size, easily removed without use of a wrench. Angle automatic shut-off nozzle, made of brass, new design with extension feature, equipped with strainer, and fine, medium and coarse spray nozzle caps.

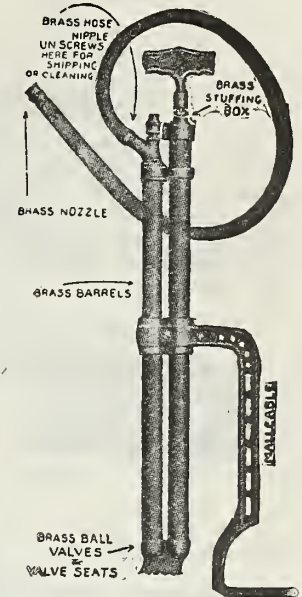
Weight boxed, 12 lbs.

Prices: GALVANIZED TANK \$6.85; BRASS TANK \$9.85. (Add postage if wanted by mail.)

NO. 26 O. K.**BUCKET PUMP**

(See cut.) — Constructed entirely of brass. It is furnished with three feet of best quality rubber hose, detachable; malleable iron stirrup. three interchangeable brass nozzles which throw a fine mist, coarse spray or a solid stream. Pump is provided with large air chamber, with brass ball valves and valve seats. Throws a continuous spray; neat in appearance as well as durable in construction. Much superior to most pumps of this class. (Wgt. 8 lbs.)

Price \$6.00



O. K. Bucket Pump

NO. 29, BRASS BUCKET PUMP

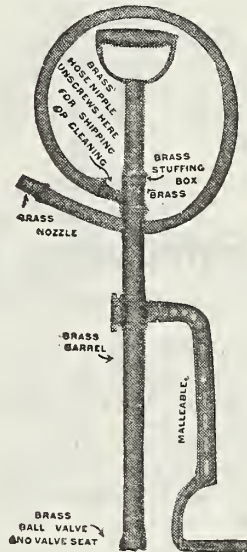
The best low-priced spray pump on the market. Double air chamber enables the operator to keep constant pressure with little effort. One fine, one coarse nozzle, 3-foot hose. (Wgt. 7 lbs.)

Price \$5.00

NO. 32, BRASS BUCKET PUMP

Well made; all working parts brass; larger capacity; bulb air chamber produces continuous spray; works easily; two nozzles. (Wgt. 12 lbs.)

Price \$7.50



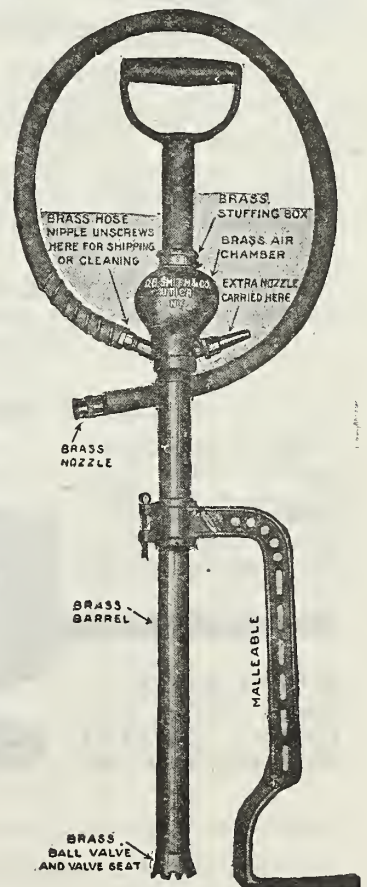
No. 29

NO. 28, WHIRLWIND WHITEWASHER

Made especially for whitewashing

Galvanized tin, brass plates, steel footrest, 3 ft. hose, double nozzle. (Wgt. 5 lbs.) See illustration, page 138.

Price \$3.50

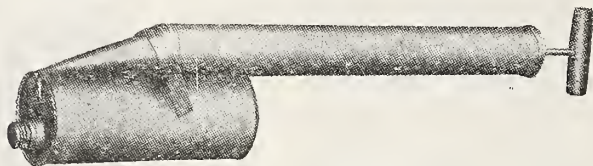


No. 32

SPRAY PUMPS—Continued

PERFECT SPRAYERS

The "Perfect" Sprayers offered below are well and properly constructed of heavy, high-grade material. We offer "Highest Quality," far superior to most makes. Full size, 20 inches long, capacity 1 quart. Adapted for all kinds of general spraying. Your choice of styles.



No. 7 Perfect

No. 6 or No. 7 (P. P. weight 2 lbs.), your choice, each 50c. Boxed and postpaid 75c.



No. 6 Perfect

NO. 126 GALVANIZED.—Same style as No. 6. More durable. Each 75c; postpaid \$1.00.

MIDGET SPRAYER.—Same style as No. 7. Perfect, but smaller; capacity, pint.
Each 40c; postpaid 65c

RAISE MUCH FRUIT?

If you have any amount of fruit to pick you need one of our new Fruit Picking Bags and a good, safe, handy ladder. Write for descriptive leaflet and prices.

NO. 5 CONTINUOUS SPRAYER

Improved 1922 style. Has 2 spray caps for spraying up, down, straight ahead or at any angle and is so constructed that it not only sprays on the downward stroke of plunger, but also when it is drawn back, thus causing a continuous mist-like spray, enabling one to spray three times as fast and with one-third the labor. Length 20 inches. Capacity, one quart. (P. P. weight, 2 lbs.)

Each, TIN, \$1.00; GALVANIZED, \$1.25; BRASS, \$1.50. Boxed and postpaid, 25c extra.



No. 5 Continuous Sprayer



NO. 3 GLASS TANK

Well constructed, the glass reservoir which is a quart Mason jar, is not affected by any kind of spray. You can have several jars of different sprays (already prepared) and when you wish to change, take out one and put in another. No delay. Extra long air chamber, special plunger and throws a strong, fine spray in any direction. (P. P. weight, packed, 5 lbs.)

Each, \$1.00; Boxed and prepaid, \$1.35

Powder Sprayers, Blowers and Dusters

These are used for applying Sulphur, Bug Death, Dry Bordeaux or insect powder of any kind.

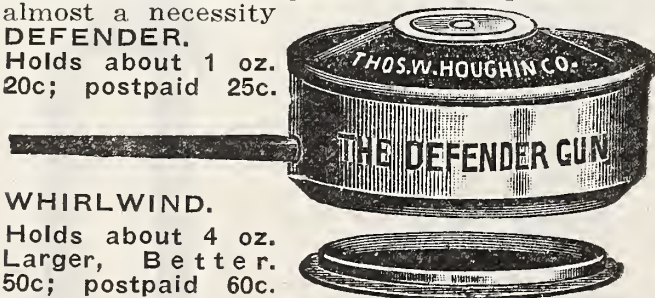
LOWELL POWDER DUSTER NO. 131

This new powder blower is the best hand outfit we have tested. Works very nicely. Reservoir is a 1-pint Mason jar. Size of spray regulated by operation of plunger. Elbow reversible, enabling operator to spray up or down. (P. P. wgt. 2½ lbs.) Price \$1.25.

CORONA DUST GUN.—A new style, light weight, durable and powerful dust gun.
Price \$3.00; prepaid \$3.50

Small Dust Guns

For applying lice powder upon birds or poultry these little guns are unsurpassed and almost a necessity
DEFENDER.
Holds about 1 oz.
20c; postpaid 25c.



WHIRLWIND.
Holds about 4 oz.
Larger, Better.
50c; postpaid 60c.

UTILITY POWDER DUSTER NO. 170.—
Descriptive booklet on request. Price \$10.50.



DICKEY BUG DEATH DUSTER.—For using when applying lime, dust or powder of any kind. For use on small gardens this is very handy. Saves powder, puts it on evenly and just where you want it.
(P. P. ¾ lb.) Each 60c; postpaid 70c



ACRE AN HOUR DUSTER OR SIFTER.—Bucket shaped straight sides, made of heavy tin, good handle, holds 5 lbs. powder. A simple twist of the wrist does the work. As its name implies, you can cover an acre of plants an hour.
(P. P. 2 lbs.)

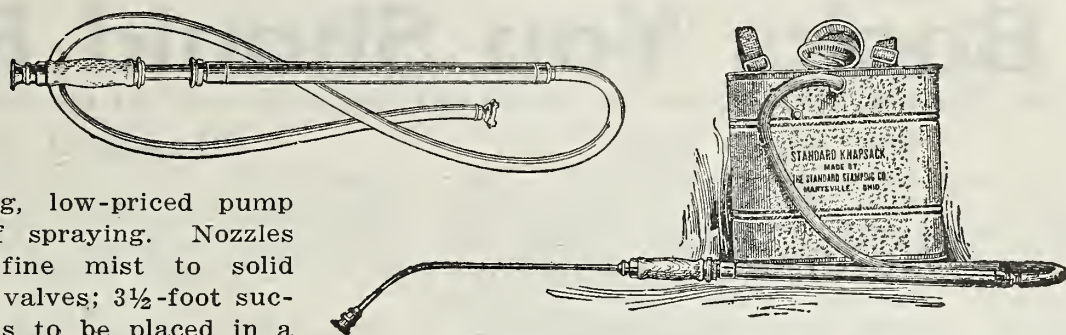
Each 90c
Postpaid \$1.15

Dry powder insecticides are becoming more popular each year as very effective results can be obtained.

STANDARD BRASS SPRAY PUMPS

A simple, strong, low-priced pump for every kind of spraying. Nozzles adjustable from fine mist to solid stream; brass ball valves; 3½-foot suction hose, which is to be placed in a bucket, barrel, knapsack or water trough; a longer hose can often be used to advantage. As a handy all-around fruit or garden sprayer, and for washing windows, buggies, autos or as a fire extinguisher, it has no equal.

Prices: Pump Only (wgt. 6 lbs.), \$5.00. With Knapsack Reservoir, \$9.00. Extension Rod, \$1.00; Extra Hose, per foot, 20c.



Standard, With Knapsack Reservoir

BAMBOO EXTENSION RODS AND EXTRAS

These are necessary for spraying trees. Our stock is made up in the best possible manner. No. 1 bamboo poles lined with either aluminum or steel tubing, screw threaded into brass connections at either end. Stopcock or cutoff necessary to make connections complete.

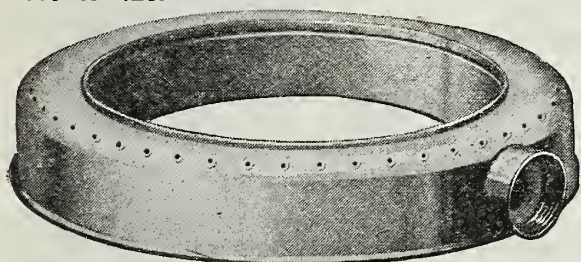
	6 ft.	8 ft.	10 ft.	12 ft.
ALUMINUM LINED	\$3.50	\$3.75	\$4.00	\$4.25
STEEL LINED		2.60	2.60	2.90

EXTRAS FOR EXTENSIONS.—Stopcock, each \$1.20; Angle Cutoff \$1.50; Dip Guard 40c.

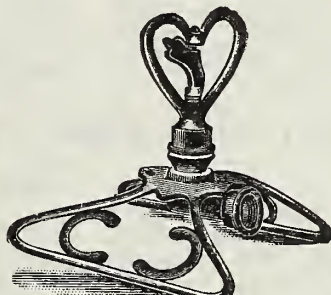


ROSE AND PLANT STAKES,
WEED KILLERS, ETC., see pages
116 to 123.

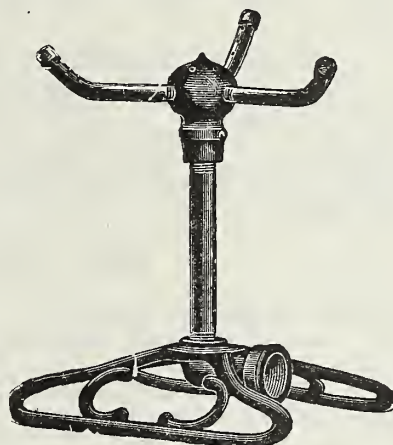
BAMBOO
EXTENSION
ROD



Fountain Sprinkler



Busy Sprinkler



Pluvius Sprinkler

NOZZLES. SPRINKLERS, HOSE MENDERS, EXTRAS, ETC.

LAWN SPRINKLER

Don't waste time holding the hose nozzle—use lawn sprinklers, and change positions as often as necessary.

Pluvius Lawn Sprinkler.—11 inch, upright standard, 3 brass arms. (P. P. 4 lbs.)
Each \$2.00

Monarch or Midget.—Same style as above, 5½ inch. (P. P. 2½ lbs.)
Each \$1.50

Busy Lawn Sprinkler.—Covers 25-foot circle. Very desirable for medium-sized yards. (P. P. 3 lbs.)
Each \$1.25

Fountain Sprinkler.—Circular brass tube. Large \$1.25; Small, sprays square, 75c; Half Circle 65c (postage 10c; any style).

Little Wonder.—Cheap, but good. Excellent in small yards. Covers 20 feet. (P. P. 1 lb.)
Each 50c

No. 31—Diamond Hose Nozzle.—Best for sprinkling; adjustable from solid stream to a fine spray. (P. P. ½ lb.)
Each 75c

Fountain Shower Hose Nozzle.—Makes a very fine mist-like spray. 25c; 30c postpaid

No. 41—Dandy Hose Clinchers.—Best mender made, simple and quick; nothing to catch; sure to hold.

Postpaid, ½ in., 15c; ¾ in., 20c

No. 40—Garden Hose Connections.—Both male and female couplings.

½ in. or ¾ in., pair 40c (6 oz.)

Hose Washers. Doz. 10c, postpaid

No. 45—Metal Mender Tubes.

½ in. or ¾ in., each 10c, postpaid

No. 42—Hose Clamps, single band.

½ in. or ¾ in., each 10c, postpaid

No. 44—Hose Clamps, double band.

½ in. or ¾ in., each 15c, postpaid

SPRAY PUMP NOZZLES

Single Bordeaux (Best for Whitewash)...\$1.25

Single Vermorel (Very Fine Spray)..... 1.00

SPRAY AND GARDEN HOSE

See page 40

PLANT SMALL FRUITS around your garden. What's nicer than delicious fresh fruit, fresh from your own garden? See Fruit Department, pages 106 to 115.

Books You Should Read

The following list comprises the newest and best books covering the different subjects.

New Garden Guide

The amateur gardener's Handbook. Thoroughly covering Vegetable and Fruit Raising. How to Plan, Plant and Maintain the Home Grounds, the Suburban Garden, the City Plot, How to Care for Roses and Other Favorite Flowers, Hardy Plants, Trees, Shrubs, Lawns, Porch Plants and Window Boxes. With Chapters on Pruning, Propagation, Fertilizers, Insect Pests, Tools, Winter Storage, Canning, Birds, Garden Furniture and 1,001 Practical Pointers. Heavily illustrated with over 275 teaching plans and diagrams and reproduced photographs, all made expressly for this Standard Text Book.

Prices: Paper covered \$1.10; cloth cover \$1.65.

Milady's House Plants

This new book, written by an expert on house plants, is fully illustrated and gives the information every lover of plants needs to be successful. Don't let your beautiful palms, ferns and plants die. Cloth bound. Price, \$1.10, postpaid; paper cover, 80c.

Plant Propagation

A new and up-to-date book so fully illustrated and plainly written that the professional as well as the amateur will find it of great value. Cloth. 180 pages, \$1.90, postpaid.

Practical Landscape Gardening

This new book, written by Robt. B. Gridland, is without a shadow of a doubt the best book we have read. Contains 91 illustrations, 67 sketches and 33 plans. Enamel paper, well bound, 266 pages. Price, \$2.65, postpaid.

Home Fruit Grower

By M. G. Kains. A simple and practical volume for the amateur, who seeks to grow high quality fruits for home needs. Nicely illustrated, 213 pages. Prices: Paper covered, \$1.10; cloth, \$1.65.

Other Valuable and Worth While Books

- | | |
|--|--------|
| Asparagus. Hexamer | \$1.25 |
| Barn Plants and Out Buildings. Powell. | 2.25 |
| Beginners' Guide to Fruit Growing..... | 1.25 |
| Butter Making. C. A. Publow..... | 1.25 |
| Every Step in Canning. Grace Gray. A book that thousands of women have wanted. 253 pages; cloth..... | 1.50 |
| Federal Farm Loan System. Myrick... | 1.50 |
| First Lessons in Dairying. Van Norman. | 1.25 |
| Making the Farm Pay. Bowsfield. 311 pages; cloth | 1.50 |
| New Onion Culture. Greiner..... | 1.25 |
| Practical Fruit Grower. Maynard..... | 1.25 |
| Profitable Dairying. C. L. Peck..... | 1.50 |
| Rhubarb Culture. New. Morse & Fiske | 1.25 |
| Silos, Ensilage and Silage. Miles..... | 1.25 |
| Soiling Crops and the Silo. Shaw..... | 2.25 |
| Strawberry Culturist. Fuller..... | .50 |
| Success With Hogs. By Dawson. 268 pages | 1.50 |
| Tomato Culture. Tracy..... | 1.25 |
| The Potato. Frazer | 1.25 |
| The Right Use of Lime for Soil Improvement. Agee | 1.50 |
| Window Flower Gardening. Heinrich.. | 1.25 |

New and Practical Books for Poultry Keepers

Use of Artificial Light

to Increase Winter Egg Production

The best book on this subject—in fact, THE ONLY COMPLETE ONE. Gives complete information on every important detail of the practical use of lights. Special attention to methods in use in the Northwest. Grant M. Curtis, 120 pages, 9x12 inches, profusely illustrated. \$1.50.

Profitable Culling and

Selective Flock Breeding

By Homer W. Jackson. Nothing equal to this money-making book has been published in years. Only complete work published on culling. Fully describes all approved methods of selecting layers. 120 pages, 9x12 inches, illustrated with 18 color plates and many half-tone engravings. \$1.50.

How to Feed Poultry

for Any Purpose With Profit

By John H. Robinson. Complete, authoritative book on feeding all kinds of poultry—1921 issue and down to date in every respect. Tells what to feed and how to feed. Complete table showing nutritive values of all poultry feeds. 112 pages, 9x12 inches, beautifully illustrated. \$1.25.

Successful Backyard Poultry Keeping

New 1921 book, and a most practical guide for those who are keeping fowls in limited space, whether to supply eggs and poultry for the family table or as a source of income. Every beginner and city poultryman should have one of these valuable books; over 100 illustrations. 103 pages, 9x12 inches. Price, \$1.00, postpaid.

High Egg Production

by Individuals, Pens and Flocks

Generally speaking, the foundation on which the commercial poultry industry rests is egg production. The only complete book on this subject. By Curtis and Jackson. Size 8½ by 12 inches; 128 pages, profusely illustrated, including two three-color charts. Art cover by Sewell. Price, \$1.50, postpaid.

Poultry for Exhibition

Growing, conditioning, training, showing and judging. The one complete book published on this subject. To have "winners" you must raise them right and show them right. This 1921 edition tells you how to do it correctly. Size, 8½x12, 176 pages. \$2.00.

Artificial Incubating and Brooding

New edition, rewritten from cover to cover. Tells how to obtain strong-germed, fertile eggs; how to operate incubators and brooders. If you want to get good hatches and raise the largest possible percentage of chicks hatched, you need this down-to-date book. 112 pages, 9x12 inches. \$1.00.

Poultry Breeding and Management

By James Dryden. This book is written for the man or woman on the farm who is interested primarily in making poultry pay. It gives in detail the latest and best systems of poultry farming, breeding, housing, feeding and incubation. Illustrated. 5½x7½ inches. 416 pages. Cloth, \$2.50.

The Call of the Hen. Walter Hogan.

Very valuable information, profusely illustrated. 130 pages, cloth bound.. 2.00

Other Books

You will find up-to-date books on RABBITS, page 156; CAVIES, page 155; BIRDS, page 152; DOGS, page 157; CATS, page 158.

BOOKS—Continued

Read in a few hours what it has taken others to learn from years and years of time and experience.

THE "BREED" BOOKS, ALL LATE AND "UP-TO-DATE"

	Price, Postpaid
Asiatics. 100 pgs., 9x12.....	\$.75
Campines. 88 pgs., 9x12.....	.75
Ducks and Geese. 104 pgs., 9x12.....	.75
Leghorns. 144 pgs., 9x12.....	1.00
Orpingtons. 80 pgs., 9x12.....	.75
Plymouth Rocks. 144 pgs., 9x12.....	1.00
Rhode Island Reds. 88 pgs., 9x12.....	.75
Turkeys. 96 pgs., 9x12.....	.75
Wyandottes. 160 pgs., 9x12.....	1.00

Fundamentals in Poultry Breeding

The author, J. H. Robinson, has made a life study of this important subject and experts proclaim it a masterpiece. Remarkably illustrated by F. L. Sewell. The most complete book ever published on poultry breeding. Size 8½x12 inches, 160 pages. \$2.00.

American Standard of Perfection. Cloth. 2.50

Egg Record and Account Book..... .45

Success With Hens. Very interesting. 234 pages. By Robert Joos. Cloth bound 1.35

The Chick Book.—Learn how to hatch and rear your chicks without loss. 80 pages, 9x12. 50c.

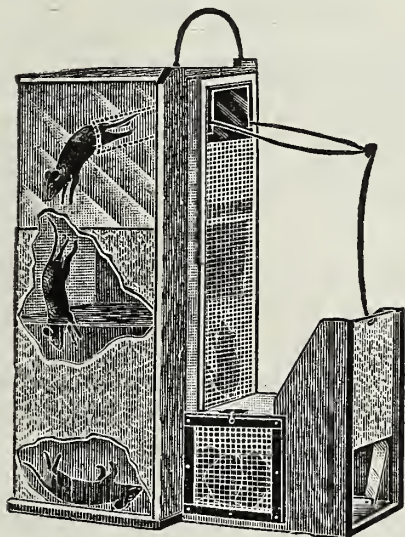
Poultry Houses and Fixtures

Shows plans of low-cost, practical, and labor-saving houses, designs for inside fixtures, roosting coops, and coops for young chicks, and appliances for the poultry yard. 1920 edition; completely rewritten from cover to cover, 112 pages, 9x12 inches. \$1.00.

PEERLESS AUTOMATIC RAT AND MOUSE TRAPS

Large size for Rats, Small Size for Mice

The Best Trap Ever Invented—The First Cost is the Last



The illustration shown here will give you a very good idea of the general construction of the Peerless Automatic Trap. Every rat that enters to get the bait, resets or reopens the trap door for "his friend" as he slips from the upper "shoot" into the tank of water.

These traps are not only sanitary, but rapid exterminators, saving their cost in a very short time.

There are no complicated parts to get out of order, the method of operation being exceedingly simple. Fully guaranteed.

The rodent entering the trap causes the door to close, which scares the rat, and it runs forward up the wire-covered passage to the balanced chute. Once on the chute, the animal is, by its own weight, is thrown into a tank of water. The downward movement of the chute reopens the door, and thus the trap is reset.

Other traps, though cheaper at first, are often useless after having caught one or two. Other mice or rats are frightened away by seeing the struggles of the captured ones, or by smelling their dead bodies.

In the New Automatic Trap only the smell of the living remains, and the more that enter the trap the greater is the attraction for others.

Large descriptive folder and "testimonials" on request.

PEERLESS AUTOMATIC RAT TRAP.—Height 25½, width 7, length 26, inches. Mailing wgt. 20 lbs. Price \$9.50. Postage extra.

PEERLESS AUTOMATIC MOUSE TRAP.—Height 10¾, width 4, length 10, inches. (Wgt. 9 lbs.) Price, \$3.50. Postage extra.

SAFETY FIRST
CHEAPER THAN OIL

DAD'S ELECTRIC LANTERN

THE LIGHT OF
ALL LIGHTS

These are a little out of our line, but of great merit.

Dad's Electric Lantern is a full-sized searchlight lantern. It stands 7½ inches tall, 5¼ inches wide, 2¾ inches thick, excluding the projecting ball, headlight and handle. It's the most wonderful light ever invented for all general purposes. It's in a class entirely by itself and should not be confused with flashlights or so-called electric lanterns using one cell.

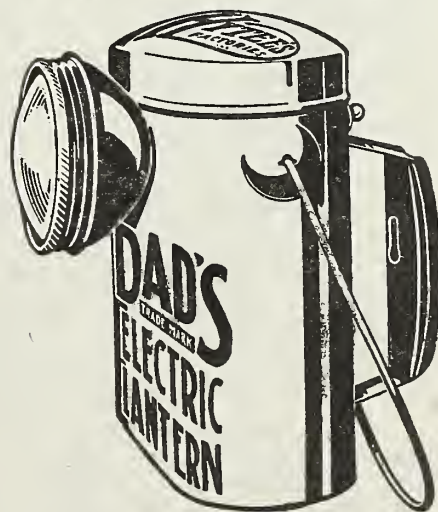
Dad's Electric Lantern uses two ordinary standard 6-inch dry cells (or batteries), obtainable from us by parcel post or in any town or village.

DAD'S NO. 1 ELECTRIC LANTERN (See cut).—A wide-angle, real light, that you can work or read by. No matches to scratch or danger from fire. Throws a powerful, illuminating, brilliant light 200 feet or more. Sure, safe and always ready for use. Ideal for Dairymen, Poultry Keepers, Campers, Travelers or Autoists. We use these around the store and on all our outing trips. We couldn't do without our "Dad."

PRICES—Dad's No. 1 General Purpose Lantern, without dry cells, \$3.50 (mailing weight 2½ lbs.); complete with two dry cells, \$4.50 (mailing weight 7 lbs.). Add postage if wanted by parcel post. (Get dry cells at your store and save postage.)

EXTRA PARTS.—Reflectors, 75c; Lens, white or red, 35c; Tungsten Bulbs, 40c, postpaid; Dry Cells (wgt. 2½ lbs.), 60c each.

PAMPHLET GIVING FULL INFORMATION AND ILLUSTRATIONS ON REQUEST



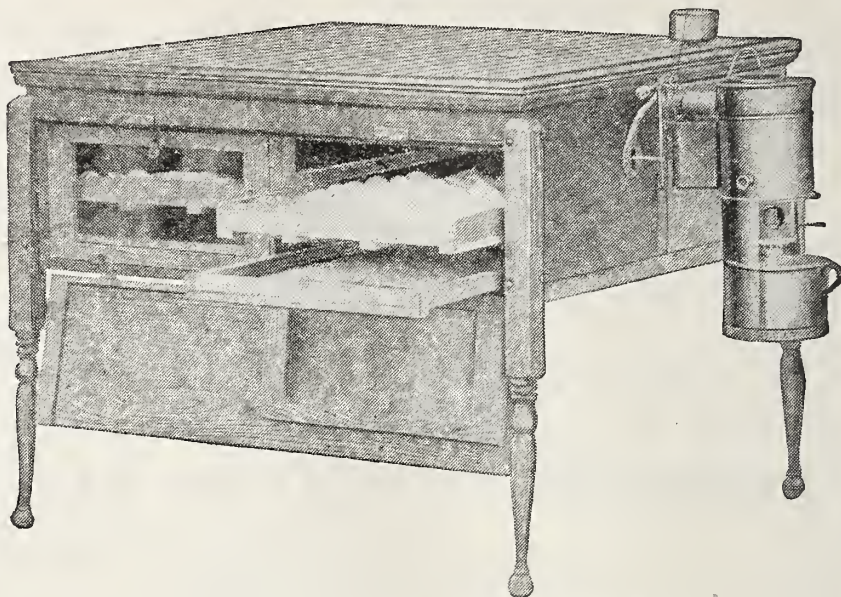
Dad's No. 1 Electric

QUEEN INCUBATORS

Recognized today as the World's Standard Hatching Machine

EVERY MANUFACTURER CLAIMS HIS MACHINE IS THE BEST. The most extravagant claims are generally made for the cheapest and most flimsy machines. Unfortunately, there is at present no law to protect the public against irresponsible exaggeration, and it is wise for you to make thorough investigation.

WE WELCOME ANY SUCH INVESTIGATION and comparison, for you will find MORE GENUINE VALUE IN THE QUEEN, for the amount of money you pay, than in any other incubator on the market. Our guarantee and 20 years' experience prove it.



No. 4 Queen, 275 Egg

Wonderful Hatchers

Queen Incubators are famous for big hatches of strong, healthy chicks that live and grow. The QUEEN is accurately regulated—taking care of a temperature variation of 70 degrees without danger. It is built of genuine California Redwood—very scarce in these days of imitation and cheap substitution. Redwood does not absorb the odor from the hatching eggs. Cheaper woods, and pasteboard lining in most other makes, retain the odors which certainly weaken and kill the hatching chicks.

REMEMBER, it is not how many you hatch that counts, but how many you raise. Chicks that hatch out WEAK AND WOBBLY, live but a few days and mean nothing to you except trouble and loss. They make one sick of the poultry business. Most of the chicks you lose in the first two weeks die because they did not hatch out with enough vitality or strength for a good start.

Reduced Prices for 1922

We order in carload lots and can make prompt shipments. All machines fully guaranteed. Prices, F. O. B. Portland:

No. 1 Queen—	85	egg capacity	\$29.50
No. 2 Queen—	135	"	39.75
No. 3 Queen—	180	"	47.00
No. 4 Queen—	275	"	61.00
No. 5 Queen—	400	"	72.25
No. 25 Queen—	600	"	108.50
No. 35 Queen—	800	"	141.00
No. 45 Queen—	1000	"	168.00

Style K Queen Incubators

These are built to sell at a lower price and are, we believe, the equal of any other incubators sold with the exception of our Standard Queen line. They have double walls, copper pipes and heater, same style regulator, but of lighter construction, double doors, etc. Queen catalog tells all.

Reduced Prices for 1922

No. 20 Style K—	70	eggs	\$17.75
No. 21 Style K—	130	eggs	29.50
No. 22 Style K—	220	eggs	39.50

Hot Water Heating Systems

The Queen Heater, tank and water pipes are made of genuine copper, the best material for this purpose. Every outfit tested under heavy pressure and guaranteed perfect.

The QUEEN Hot Water System eliminates the injurious drying out tendency found in all hot air incubators and provides a soft, uniform heat over every part of the egg chamber that is most natural for the hatching eggs. This form of heat under ordinary conditions makes unnecessary the application of moisture.

The QUEEN is not a cheap incubator, compared with many of the cheaply constructed machines on the market, but it is the "Best Bargain," as it will be turning out high percentage hatches years after the cheap machines have been junked.

Queen "Electric" Heater

Recognizing the growing demand for incubators heated by electricity the Queen Incubator Company have had their experts at work testing out various methods and now have devised a heater that will fit any Queen Incubator from 70 to 1,000 egg size and use only the necessary heat to maintain 103 degrees, and do it at a minimum cost. The electric attachment is a great success, quickly attached by any one. The only essentials to operate, with electric current, are that it must be 24-hour service and of 110 volt alternating current or 32 volt if direct current. This attachment simply takes the place of the lamp and works automatically. Has safety fuse and pilot light. It's great if you got the "juice."

ILLUSTRATED AND DESCRIPTIVE LEAFLETS ON REQUEST

You buy the regular Queen outfit and get the electric heater extra, either now or later. You have the lamp in case of "no juice."

QUEEN CATALOG

We will gladly mail to you a copy of the Queen Incubator Co.'s illustrated and descriptive catalog. It goes into detail and plainly shows you just how they are constructed and why they are so successful. Write us today; a postal will do.

1922 QUEEN BROODER STOVE

The only Coal Burning Brooder Stove with Automatic Control of Both Check and Draft

Don't Hatch Chicks and Lose Them. If you can get good coal, by all means use a Queen

The Queen burns most any kind of coal, but chestnut sizes in all kinds of hard or soft coal or coke is best. Briquettes burn equally well. Of course, hard coal will not cause the pipe to become sooty as quickly as others.

Without a question the "Best" coal burning brooder stove on the market today. **Note the improvements**—the self-feeding, straight, flaring fire bowl, **no clogging** like in the old barrel-shaped bowls. A full-size rocker grate, a real automatic wafer regulator that really works in connection with a **right-principle** damper or check valve. A fire-proof, ventilated stove base and a collapsible, four-piece hover (to save freight charges and to save room when not in use.)

The QUEEN Colony Brooder is a new and improved design of brooder stove. It is made of highest quality iron castings that will wear and last indefinitely.

There are no drafts on the smoke pipe of the QUEEN. The check rests on top of the stove and opens outward when fire is too warm, thus giving a gentle inflow of air to retard the heat. While the opening of the draft to increase the fire is located on the top of the stove, it opens into the fire at the base through an opening extending down the side to the bottom. This feeds the draft into the fire from underneath with no opening below the hover. As will be seen from the illustration, the check and the draft lids are cast together and operated together. Thus when the fire is too hot, the wafer automatic regulator expands and closes the draft and opens the check, but if at any time it gets too cool, the wafer contracts and closes the check and opens the draft. This keeps an even heat all the time, both night and day, in cold weather or warm, and does it automatically. You don't have

to pay any attention to it whatsoever. Just set the regulator for the proper temperature at the start of the season—it will do the rest.

Next to a good draft through the chimney, the principal secret of a good fire in any stove is a **good grate** that will free the fire from ashes properly and prevent clinkers. The grate in the Queen stove is the **rocker type** and strikes the fire at four points. This is far superior.

The hover used on Queen stoves is collapsible and made of four pieces of galvanized iron. Comes knocked down, with holes punched and stove bolts attached, ready for putting together. This saves freight and lessens the danger of damage when not in use. This hover has a cast-iron ring on top which sets firmly around the top of the stove. It is furnished with a wire hook to which rope and pulleys may be attached, but it is not necessary to raise the hover to put in coal.

The Queen stove provides a constant, correct heat, and a constant distribution that makes the chicks develop into **STRONG, HEALTHY CHICKS**. By brooding with a "Queen," the chicks get plenty of pure, fresh air, plenty of exercise, and there is no **POSSIBLE CHANCE OF THEM CROWDING OR SUFFOCATING**.

Reduced Prices for 1922

Queen No. 2 Brooder Stove

This is the most popular size and will brood any number of chicks up to 1,200. Diameter of grate, 10 $\frac{3}{4}$ inches; diameter of hover, 52 inches. Price \$26.50.

Queen No. 1 Brooder Stove

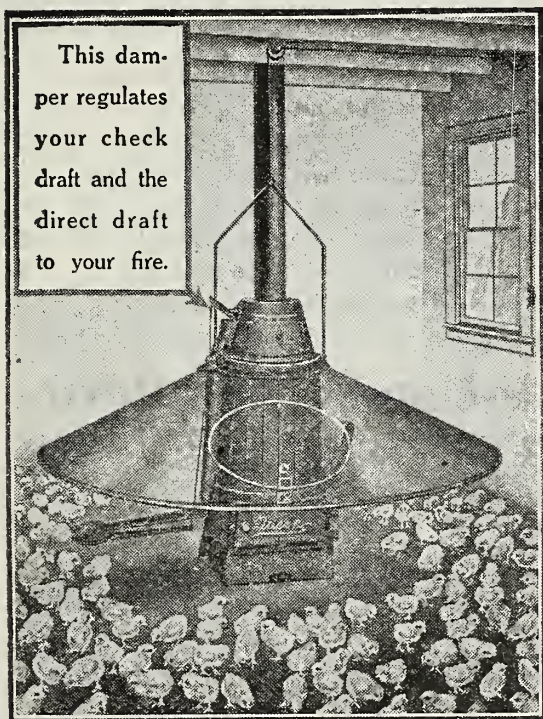
This size is made for those who have limited room and do not need so great a capacity. No. 1 will brood any number of chicks up to 600. Diameter of grate, 9 inches; diameter of hover, 42 inches. Price \$21.50.

NOTE.—Order what 3-inch stovepipe you need at 30c; 2-foot length; elbows, 40c.

Queen Electric Hover

The Queen Electric Hover is what many of our customers supplied with "Electric Service" have been waiting for. It is a real efficient 36-inch hover, made of galvanized iron, equipped with a safe and automatic electric heater and large enough to hover from 100 to 500 baby chicks. It's "all hover," no center space is lost to heater or other devices. It comes highly recommended and we know the "Queen Company" would not let it go out unless it was O. K.

New illustrations will reach us too late to show in this catalog. **SEND FOR DESCRIPTIVE AND ILLUSTRATED LEAFLET IF INTERESTED.**



Every chick hatched represents possible profit. The work laid out before you is to get this chick into a vigorous laying hen, or fit for market in the **SHORTEST TIME** possible. Start and finish them with "Queens."

NEWTOWN COLONY BROODER

A Blue Flame, Wickless, Oil Burning Colony Brooder—Automatic Regulator—Practical, Safe and Successful. Illustrated Descriptive Folder on Request

The Newtown is giving efficient service in every state of the Union and nine foreign countries. It is simple, safe, and durable—a real practical device.

The illustration shown is from a "flashlight" photograph taken at night and shows just how the baby chicks rest in comfort. NO CROWDING or PILING UP in the center.

NOTE the metal heat deflector and ventilator under the top. It's the secret of the Newtown's success. A patented feature found in NO OTHER brooder of this type.

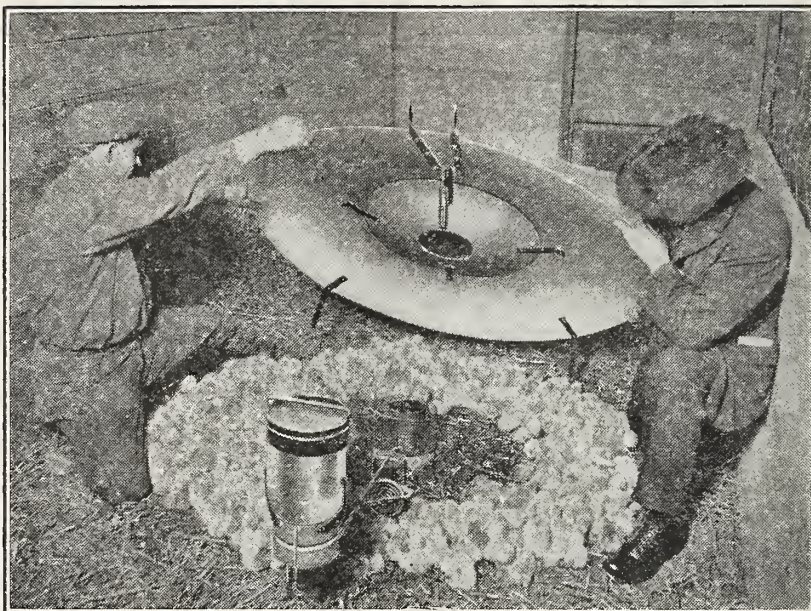
Automatic Regulator.—The flow of oil through the sight feed dropper is automatically controlled by a powerful thermostat under the hover. This dropper is also provided with safety adjustments which make it impossible to feed too much or too little oil to the burner. This not only insures safety, but provides a constantly correct brooding temperature.

An Abundance of Heat.—In the matter of "spitting out heat," the Newtown is the most efficient brooder in its class. Every particle of heat produced by this powerful burner passes directly into the heat radiator. This radiator was designed especially to cause the heat to circulate so that practically every heat unit is utilized. Because of this exclusive Newtown feature these brooders can be operated in large buildings with larger flocks, with a minimum quantity of fuel.

Don't use cheap coal oil. "Elaine" or a grade equal to it will give the best satisfaction.

Heat Properly Distributed.—The construction of the Newtown Heater is such that the highest temperature is maintained near the outer edge of the deflector. There is no hot center, and consequently there is no crowding or piling up. The chicks hover in a circle around the outside edge of the deflector. This feature gives absolute comfort and fine growing conditions.

Air Always Fresh and Pure.—The arrangement of the burner and heat radiator was designed especially to provide warm, fresh air under the hover.



Newtown Colony Brooder
Metal Hover up, Showing 750 Day-old Chicks

The Glass Oil Fount is easily filled, holds one gallon, and is located outside the hover. This prevents any possibility of over-heating the oil and absolute safety is the result.

The Heat Radiator is bolted into the top of the deflector. The heat from the burner passes into this radiator which assists the deflector in distributing it evenly over a large floor space. It also provides a larger radiating surface, and consequently insures the maximum heat with the minimum amount of fuel.

The Blue Flame Wickless Burner.—It burns coal oil (kerosene) with a steady blue flame. The burner is surrounded by a safety jacket.

Right Sizes—Right Prices

Each brooder is shipped with everything complete in one crate, all ready to operate. A thermometer and full instructions for operating are furnished with each brooder.

No.	Hover Diameter	Chick Size	Price
118	36 inches	300 to 500	\$25.00
125	52 inches	up to 1,000	32.50

Descriptive leaflet on request.

Humane Anti-Hen-Setting Device

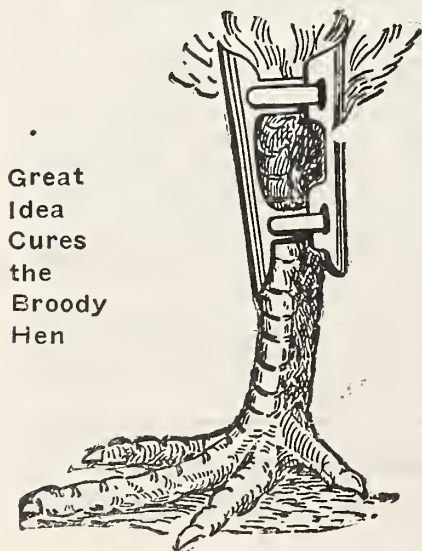
(Patented March 13, 1917).

The only device ever invented that will stop a hen setting and cure her of broodiness in twenty-four hours, and do it without the slightest pain or suffering for the hen, and no wasted time or trouble for you.

Clasp on leg and let the hen run free for 24 hours, then remove.
PRICE, 15c each; \$1.25 dozen, postpaid

READ THIS: "I have investigated and examined your Anti-Setting Device for breaking up setting hens and can see nothing about your method that can be called cruel or that will cause physical pain. I think it the most humane way of treating a setting hen, and you have my consent to use it."—Fred J. Bartles, Humane Agent, Hornell, N. Y.

"I believe it to be the most practical and humane method of preventing hens from setting in use today. It does the trick so quickly and efficiently."



Great
Idea
Cures
the
Broody
Hen

Kresky's "Pride of Petaluma" Brooder Stoves

They burn oil, are self-regulating, work automatically, and give perfect satisfaction

The Kresky large room brooders are recognized on the Pacific Coast as the successful and most economical method of brooding and raising chicks on a large scale. Our largest and most successful poultrymen are operating Kresky's. They brood from 500 to 1,500 chicks per brooder.

We highly recommend these brooders and have sold hundreds. Properly installed in correctly constructed houses they are unsurpassed.

We cannot in the limited space on this page give you the details of construction of these wonderful brooders, but we do show you illustrations to give you an idea of what they are like.

NOW—If you are further interested and would like to learn more about the "Pride of Petaluma's" and "Kresky's Idea" of the proper method of brooding chicks, write and we will mail Kresky's large illustrated and descriptive 30-page catalog.

The No. 2-B and No. 4-B are the most popular styles and most in demand, the only difference between these two is that the size of the radiator No. 2-B is 42 inches and No. 4-B is 50 inches.

The model 12-A is also an excellent outfit and will give perfect satisfaction. Many prefer it and it sells at quite a little less. These three sizes always on display at our Portland stores:

Kresky's Reduced 1922 Prices

F. O. B. Portland or Petaluma

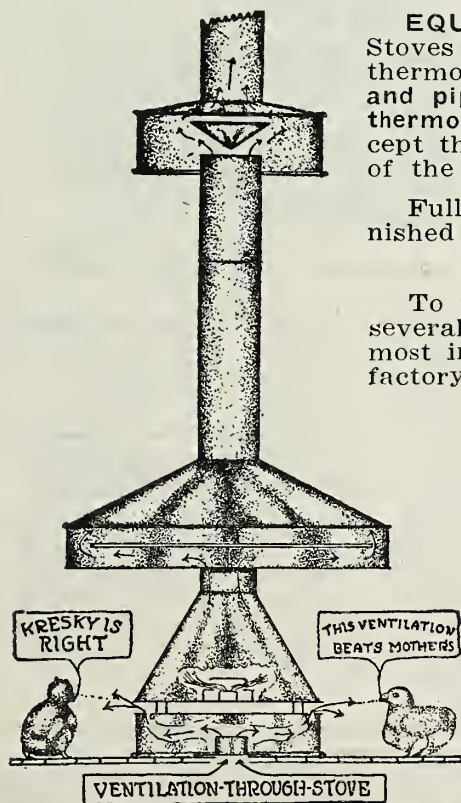
No. 2-B, 42-inch Radiator, all complete.	\$57.50
No. 4-B, Northwest, 50-inch Radiator.	\$60.00
No. 12-A Model, 42-inch Radiator.	\$50.00

Always complete stock of these sizes for prompt shipment.

Stove Pipe Combination for Kresky's

You will need this equipment to set up your outfit properly and you better order it with your stove, as Kresky's stove pipe is heavier and the seams are sealed, very important in the operation of the draft.

Outfit consists of one 24-inch and 1 30-inch galvanized 5-inch pipe, five 24-inch extra quality black pipe, one saddle or one roof plate (state which you want and pitch of roof), one hood for pipe and one ceiling plate. Price Complete, \$5.50.



Kresky No. 2-C

EQUIPMENT.—Kresky's No. 2-B, No. 4-B and No. 12-A Brooder Stoves have the same automatic regulator, oil tank, oil pipe and thermometer. The complete outfit consists of one 15 gallon oil tank and pipe, latest improved automatic regulator, special tested Kresky thermometer and all accessories needed to install and operate, except the stove pipe combination, which is not included in the price of the stove but can be supplied. See note above.

Full and complete directions for installing and operating are furnished free and found contained in the oil tank.

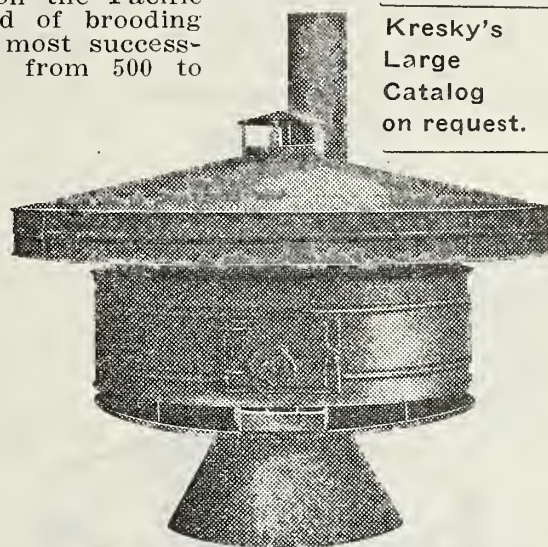
Kresky's 1922 New Model Brooders

To meet the demand of all class of buyers, Kresky is cataloging several new models for this year. We aim to have in stock those most in demand. Should we be out, we will wire the orders to the factory to be shipped direct.

KRESKY'S LATEST NO. 2-C.—The illustration herewith shows the radically new working principles developed in this late creation. It is especially designed for those who demand a brooder stove that is practical for 250 to 600 chicks from the time they are hatched until they are ready to go on the roosts in unheated houses. It is a high class, efficient outfit at a reasonable first cost and will operate at a very low cost. It is really a little "Marvel," the most practical, reliable, economical, cleanest, easiest operated and without question the safest brooding device ever offered in this class and size.

PRICE NO. 2-C, as herewith illustrated, F. O. B. Portland or Petaluma, \$43.50.

NOTE.—We will have in Portland stock all Kresky's goods listed in this catalog. Other styles brooders will probably be shipped direct from Petaluma factory.



Kresky's
Large
Catalog
on request.

Style No. 2-B and No. 4-B

An 8-ft. metal canopy and curtain can be supplied for 12-A. Write.

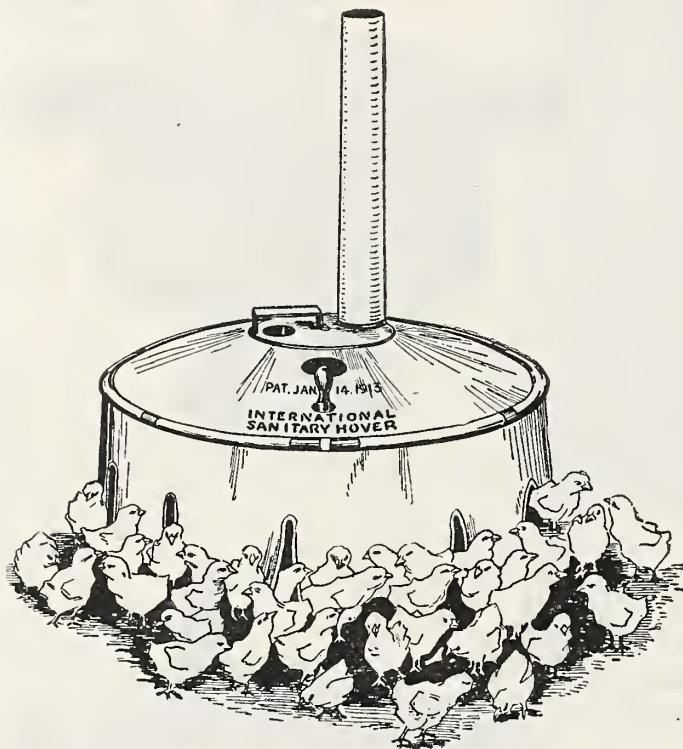


Kresky No. 12-A

International Sanitary Hover

We sold and recommended the International Sanitary Hovers five years ago and are mighty glad that conditions have changed so that we can again secure these wonderful little "mother hens" for our customers.

The one perfect hover. A sanitary, successful, economical brooding device. Safe and sure. All metal and fire-proof. Used and recommended by thousands of poultry raisers throughout the United States.



International Sanitary Hover

SANITARY HOVERS are as practical for the small back-yard poultry raiser as for large poultry plants. They are usable anywhere, ready for business wherever placed. All that is necessary is to place the Hover where you want and light the lamp. It's so easy to care for; no kneeling in litter and dust to get at the lamp.

CORRECTLY CONSTRUCTED

It is the warmest near the curtain.—This causes chicks to distribute themselves around the edge of the curtain, where they have plenty of room and fresh air as well as warmth. No deaths by crowding of the chicks to the center.

CAN BE OPERATED ANYWHERE

It is especially suitable for use in colony or brooder houses, but it can be used with equally good results in a vacant room, a dry, light cellar, a corner of the hen house, shed or barn. A piano box or a large dry-goods box with a water-proof roof will do nicely.

It can be picked up and carried around with ease. Weight only 30 pounds.

The International Sanitary Hover provides 540 square inches of hovering space. Gases and fumes from the lamp cannot get under the hover.

This hover is constructed of heavy galvanized iron and is sanitary, vermin and fire-proof. Will last for years and give perfect brooding service every day. It is only necessary to lift the thermometer to ascertain the temperature under the hover.

Use these Sanitary Hovers and every chick will have a warm retreat during the day, sleep comfortably during the night and come out healthy, happy and hungry in the morning.

BEST BY TEST.—Many tell us that they raise 94, 96, 98 and some even 100 per cent of the baby chicks put under this hover. It has many advantages that the old hen does not have. It's always warm and ready to "brood" the chicks; "no lice or big feet."

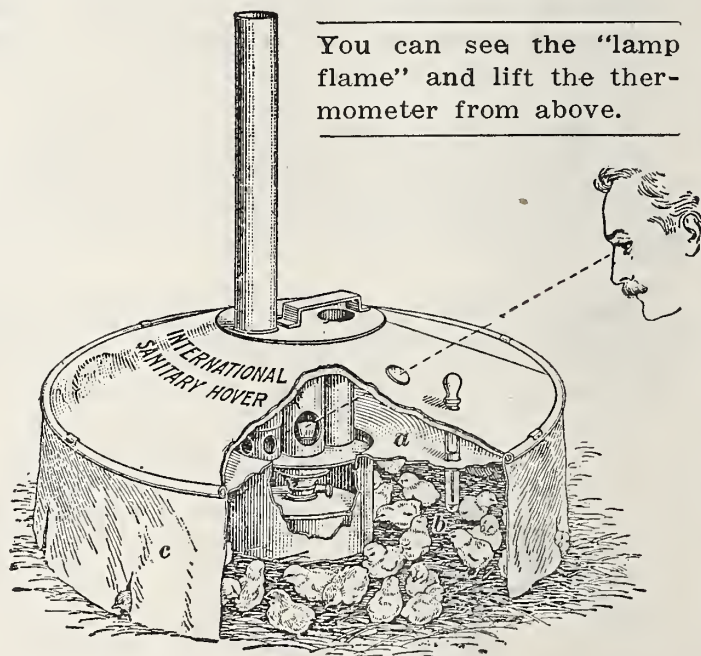
The air is kept wholesome by diffusion through the cloth curtain. There are no drafts under the hover.

It hovers 100 chicks and has enough ventilation for 2,400. Weight in carton for shipping, 33 lbs. Not mailable.

Reduced Prices for 1922

Portland price, complete, \$15.00 each

LARGE, 8-PAGE LEAFLET OF INTERESTING "facts" PERTAINING TO THE SANITARY HOVER ON REQUEST.



Sectional view

Illustration above shows the lamp, lamp bracket and ventilation pipes that all lift out together without disturbing the chicks or losing any heat from under the hover.

Baby Chicks — Pure-Bred Poultry

This department is under the management of Geo. L. Routledge, a recognized poultry expert. Send your orders to us and get chicks from healthy, vigorous stock, properly mated. Stock on hand at our East or West Side stores during hatching and breeding season. See page 148.

Illustration above shows parts and general construction, simplicity and perfection of the International Hover, which we claim is the "Best" small hover on the market, and we highly recommended it to our customers. Baby chicks "take to it" like "sweet sixteen to candy."

OAT SPROUTERS

The Perpetual Poultry Silo—grows green feed while you wait—makes two to four bushels of feed from one of grain—runs up the egg yield—cuts down the feed bill—insures the health and vigor of your poultry. Ask any authority or poultryman who has fed Sprouted Oats.

Every poultryman should feed Sprouted Oats, and the only satisfactory way to produce them is in a correctly-built, lamp-heated, sectional oat sprouter.

No other green feed takes the place of the wonderful quickening virtue of the young, growing oat sprouts.

The State Experiment Stations and the national egg-laying contests all feed Sprouted Oats.

If you want lots of eggs in winter when the price is high and in summer when the grass is dry, feed Sprouted Oats.

If you want fertile eggs in spring and strong, virile chicks, feed the hens Sprouted Oats.

PROGRESSIVE METAL GRAIN SPROUTER For 500 Hens or Less

This is an ideal sprouter for large flocks. It contains a soaking tank at the top and when ready to empty the soaked grain into the top section, the tank is easily inverted as shown in the picture. The grain and extra water is dumped into the top section and the extra water drains down through the other sections, moistening the grain, and then out through a drain pipe in the bottom.

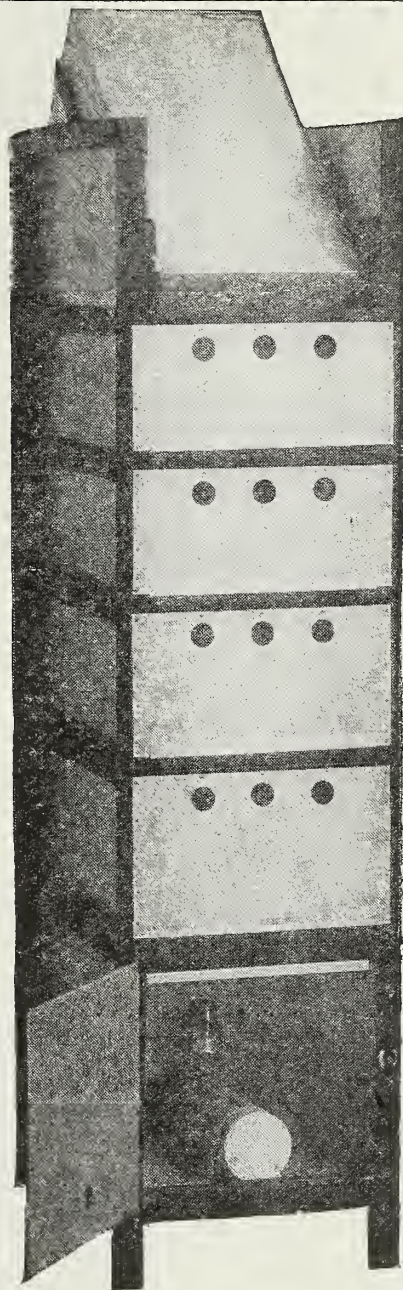
Each of the four sprouting sections contain removable metal, perforated bottoms, and the oats are lowered each day from one section to the other by removing the bottoms to each section. On the fourth morning the grain is ready to take off and is in the lower section. Lamp is removed and box inserted, removable bottom pulled out and sprouted grain drops into the box ready to feed.

EASILY CLEANED.—Any good sprouter should be so arranged that it can be thoroughly cleaned, as slime and mold from the oats will in time cause sickness among the flock. This sprouter can be washed out with a hose and thoroughly cleaned, and it will last for years, as it is made of metal with exception of frame on outside.

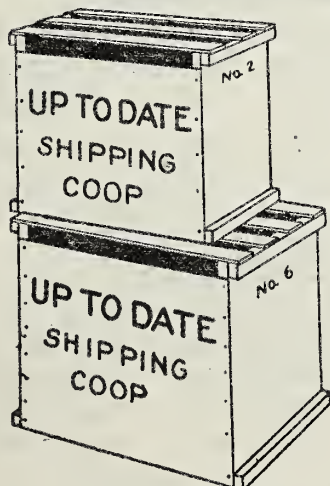
EASILY HEATED.—One filling of the lamp of oil will generally last for seven days, as very little heat is required with this sprouter. Each lamp is furnished with the O. K. Safety Air-Cooled Burner. The metal air shaft in the back of the sprouter carries warm, moist air to all the sections and also furnishes a mild heat to the soaking tank.

Sprouter is 60 inches high, 24 inches deep and 15 inches wide. Full capacity of this sprouter is about 28 quarts of dry oats, which would be sufficient for from 400 to 500 hens, depending on the system of feeding other foods. Furnished with thermometer, large capacity safety lamp and instruction sheet. Price \$20.00.

Feed your sprouted oats
in Sanitary Feeding
Pans. See page 141.



Progressive



Up-to-Date Shipping Coops

These coops are really "up to date" and will give your customers that impression of you if you use them when shipping. Buyers who pay fancy prices for thoroughbred birds like to see them come in a nice coop—not some old cracker box or oil case. These coops are light, but strong. The ends have the cleats nailed on. We ship in the flat to save charges, but it's an easy matter to nail them together, for each part is marked.

	Width	Length	Height	Each	Doz.
No. 2	10½ in.	18 in.	24 in.	60c	\$ 6.60
No. 4	10½ in.	24 in.	24 in.	75c	8.25
No. 6	19½ in.	24 in.	24 in.	95c	10.75

For Parcel Post—No. 2 weight 10 lbs.; No. 4, 12 lbs.; No. 6, 18 lbs.

Capacity.—No. 2 suitable for single birds or pair Mediterraneans. No. 4 for Asiatic male, American or Mediterranean pair or small trio. No. 6 for a pen of five birds, any variety.

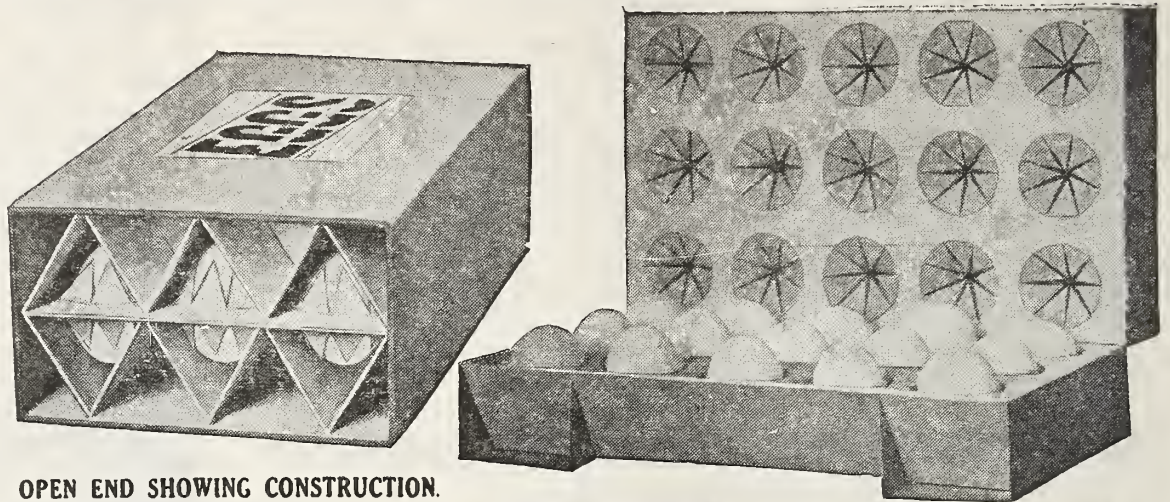
Let us help you in your poultry work. Our free service department under the direction of George Routledge will be of help to you.

Egg Carriers for Commercial and Hatching Eggs

POSTAGE.—In ordering above egg boxes by mail or P. P., be sure you add extra money for postage. RATE TABLE PAGE 1. P. P. stands for parcel post weight, not PREPAID.

Diamond Egg Boxes

CUSHION
FRAME,
LIGHT,
STRONG,
AND
SAFE



THE DIAMOND EGG CARRIER is a superb packer entirely different and in a class by itself. It naturally costs more, but it is worth double the price of other kinds. In the end they are the cheapest carrier to use as there is no breakage of eggs and no severe jarring to injure eggs shipped for hatching purposes. The "V" shaped fillers hold the egg in suspension, in other words the "cushion frame" protects them perfectly.

DIAMOND FOR "HATCHING EGGS"

Cushion Frame Carriers for High Class Breeders and well worth the price.

Size	Doz. Wgt.	Each	Doz.
15 egg	15 lbs.	35c	\$3.75
30 egg	23 lbs.	50c	5.90
50 egg	40 lbs.	80c	9.50
100 egg	75 lbs.	1.75	19.00
12 egg, Duck	18 lbs.	40c	4.00
9 egg, Goose	22 lbs.	50c	5.00

DIAMOND PARCEL POST SIZES

Have your customers empty these cases and return to be filled again and they will last long enough to reduce the cost to 1c per dozen.

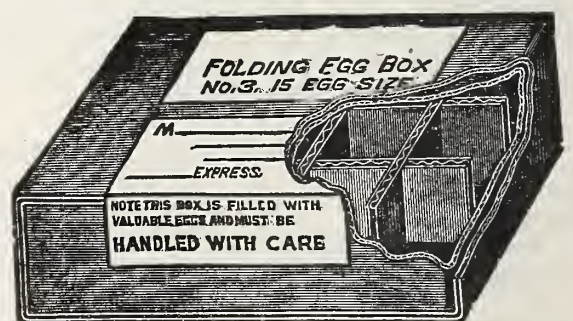
Size	Doz. Wgt.	Each	Doz.
1 doz.	12 lbs.	30c	\$3.50
2 doz.	18 lbs.	45c	5.25
3 doz.	28 lbs.	60c	6.75
4 doz.	35 lbs.	75c	8.50

Descriptive fully illustrated leaflet on request.

Address labels, tissue paper for each egg, and gummed paper for sealing the box free with each packer. Order early so you will not be disappointed in your delivery. Prices below subject to changes.

Up-to-Date Egg Carriers

Do not class these "Up-to-Date" boxes with the cheaply constructed egg boxes that are made along similar lines. These are double strength and cushion frame on all sides. Note the illustrations carefully. Safe and reliable for the mailing or expressing of "fancy eggs" for hatching.



Up-to-Date Egg Carriers

This has been a popular egg box for several years. Note the extra outside "slip-on" cover. A safe box for the expressing of fancy eggs, for hatching. Each egg can be wrapped in paper before dropping into its place, to keep them from shaking should they be smaller than the section.

15-Egg-Size. Open Corner Showing Egg Cells

Size	Weight, Empty	Each	Doz.
15 egg	1 lb. each	25c	\$2.75
30 egg	1½ lbs. each	40c	4.50
50 egg	2¼ lbs. each	60c	6.50

Add postage if wanted by mail

"Safety First" Parcel Post Egg Carriers

This egg packer is made just like our "Up-to-date," see cut above, but of different capacity, and has a folding top in place of the "slip-on" cover. Perfectly reliable for sending eggs by parcel post.

PRICES, 4 SIZES

1 Dozen size.....	Each 25c	Doz. \$2.75
2 Dozen size.....	Each 35c	Doz. 4.00
3 Dozen size.....	Each 50c	Doz. 5.50
4 Dozen size.....	Each 60c	Doz. 6.50

CHOLERINE.—The perfect remedy—is a guaranteed preventative and specific for White Diarrhoea, Cholera, Roup, Limberneck, and all other germ diseases afflicting chickens, ducks, geese, turkeys and pigeons. We buy Cholerine in carload lots. You will use it sooner or later. Start today by ordering a supply. See Page 147.

Up-to-Date Baby Chick Boxes

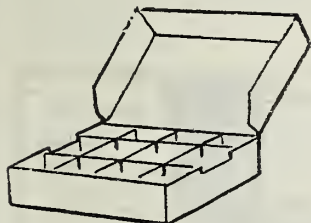
These insure the safe arrival of your chicks

Well made, properly ventilated, made from the best grade of corrugated cardboard. Shipped in the flat, but quickly set up by anyone. The use of this box has made long distance express shipments of live baby chicks possible and safe.

Don't wait until your chicks hatch to order your boxes. Order early and be sure of stock when you want it.

Size	Weight, Empty	Each	Doz.
25 Chick	P. P. 1 1/4 lbs.	25c	\$2.50
50 Chick	P. P. 2 1/4 lbs.	40c	3.50
100 Chick	P. P. 3 lbs.	50c	4.75

NOTE.—Add ample postage if wanted by parcel post.

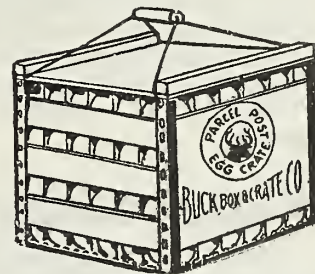


The Ideal
12 Egg Packer

Ideal Egg Box

Every poultry keeper who sells eggs should use these folding cardboard egg boxes to deliver eggs in. They are folded flat, but the corners are locked, all ready to open up and drop the eggs in. No errors in counting, as each holds just one dozen.

Price—Per doz. 20c (P. P. 1 3/4 lbs.); 100 for \$1.25 (P. P. 11 lbs.); 1,000, write for price.



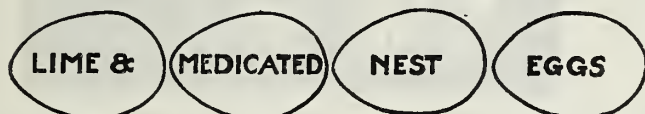
Buck 12 Dozen
Parcel Post
Egg Crate

Buck 12-Dozen Egg Crate

Made of wood, cardboard fillers. Very light, but strong; metal corners; holds 12 dozen eggs; lock wire bale, wooden handle. (P. P. weight 5 1/2 lbs., set up.)

Each 75c; Six Doz. Size 60c

LIME AND GLASS EGGS



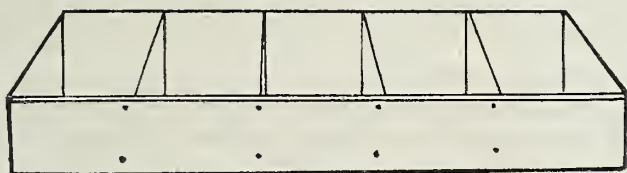
OPAL GLASS NEST EGGS.—Best grade heavy glass, correct shape. 3 for 10c; doz. 40c, postpaid 50c. Low price per gross.

LIME NEST EGG.—Preferred by many; non-breakable. More natural.

Each, 3 for 15c; 12 for 50c. (Wgt. 2 lbs. per dozen.) Add postage.

Medicated or Lice Repellant.—Sale discontinued; government agents condemn them.

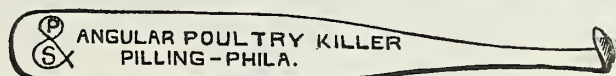
GALVANIZED HEN NESTS



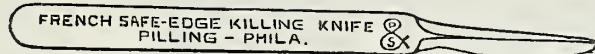
Galvanized Hens' Nests

GALVANIZED BOX NESTS.—Latest and best, full size, five compartments. Price: \$4.00 each

POULTRY KILLING KNIVES



ANGULAR.—Nickle plated handle.....75c



FRENCH.—Nickle plated handle.....75c



ROBERT'S.—This is a very popular style. Full size, good grip wood handle, highest quality steel blade. Postpaid 75c

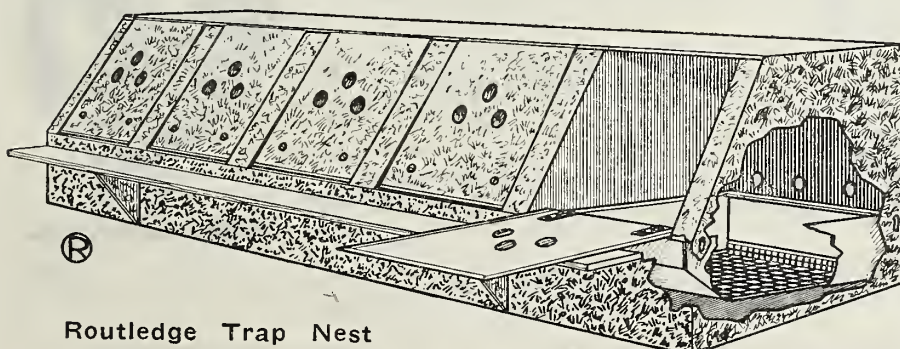
COPPER WIRE NESTS



Wire Nest

Sanitary, no place for lice to hide, easily cleaned, strong and well made. Hang on the wall or between 2 poles or gas pipe. Each 25c; dozen, \$2.50. Postage 10c each, 50c doz. extra.

ROUTLEDGE SANITARY TRAP NEST



Routledge Trap Nest

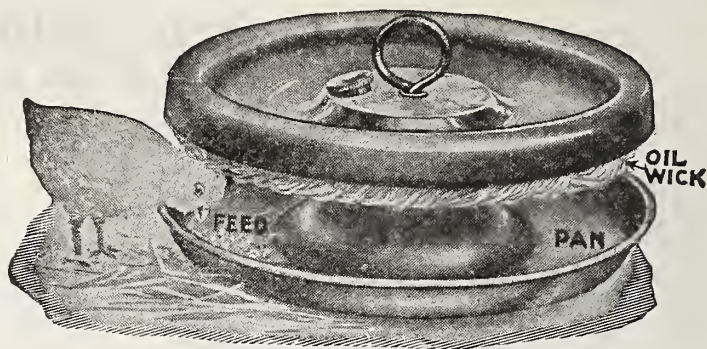
Correct in design, well made of strong, galvanized iron—simple in construction, yet positive in action. Nests roomy, well ventilated. Wire screen (1/4-inch mesh), bottom prevents the hen from scratching. Door well supported when open, sure to close as hen steps in (a 2-lb. weight will trip it). Posi-

tively guaranteed in every way. No flimsy catches, hooks or wire to get out of order. Illustration (with corner cut out) gives you a good idea of this "up-to-date" sanitary nest. Five nests, 10x12 inches each, in a set. Price Per Set \$8.50. Quantity price on request.

Automatic Chick Greaser

(See illustration.) Every chick its own doctor. It is the large lice which collect on the heads of young chicks which cause them to droop and die, and formerly the only way was to catch each chick and rub grease on its head; but this slow and tedious process is not necessary since the invention of the Automatic Chick Greaser. The wick around the upper part of the greaser is saturated with Conkey's Head Lice Ointment or with a mixture of two-thirds lard and one-third kerosene (or oil) and every chick which eats out of the pan will get its head thoroughly greased in a very few minutes.

Can be moved from one pen to another.
Price \$1.50; mailing weight 2 lbs.; add postage.

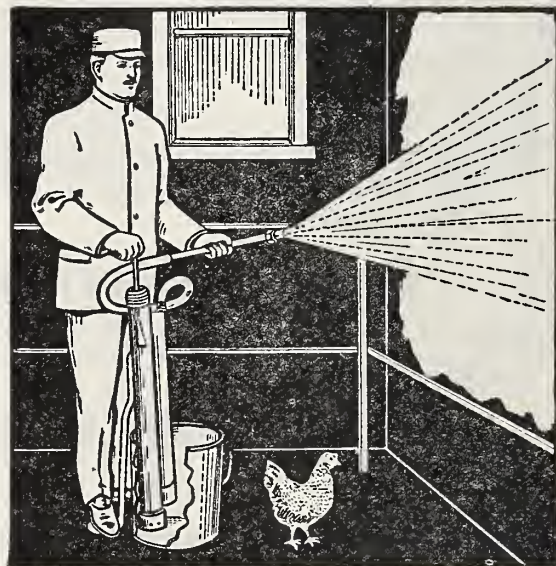


Automatic Chick Greaser

Whitewashing and Whitewash

The illustration here shows our No. 28 Whirlwind Sprayer in operation. No. 28 is made especially for whitewashing. See page 125 for price, etc.

NOW FOR THE WHITEWASH.—This year we are offering to our customers a cold water combined whitewash paint and disinfectant, called Creola. It comes in powder form and is mixed with either cold or hot water (full directions on each can.) It is so convenient, and so good, that we are sure you will like it. You can either spray it or paint it on. For use in poultry houses, cellars, stables, fences, walls, tree trunks, etc. See page 123 for prices.



Egg Preservers

Pre-Egg-Server.—Soluble Water-Glass. This powder comes to us highly recommended, equal in every way to the old form liquid Water-Glass. Will keep eggs fresh for a whole year. One package to 10 quarts water is enough for a 5-gallon crock, or 15 dozen eggs. Full directions on each package. Price postpaid 25c per package.

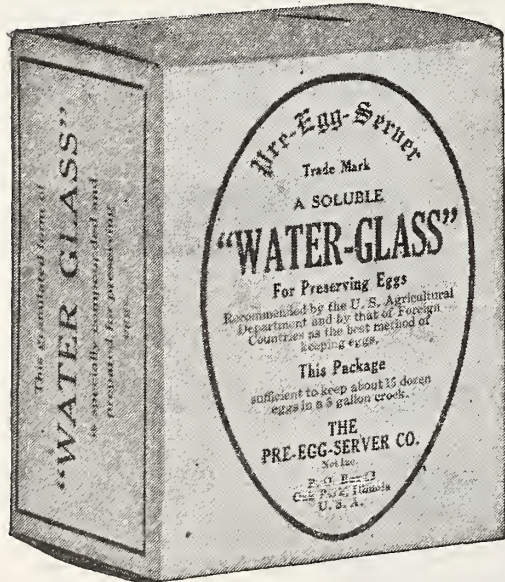
Yankee Egg Preserver.—Comes in flat tins and you simply rub it on the eggs, a child can do it. It will preserve the eggs for nine months or longer. No cold storage or special care required.

Price: Per Tin (enough for 3 doz. eggs), 40c postpaid.

Water-Glass (Liquid).—This is the old, well-known egg preserver in liquid form. Use 1 part Water-Glass and 9 parts water to make the solution to cover the eggs. (Cannot be mailed.)

Prices: Qts., 50c; 2 qts., 80c; gal., \$1.25; 5 gal., \$1.50

Note.—If you want 5 or 10-gal. stone jars, write for prices.



CAPONIZING TOOLS

Poultrymen can double their profits by Caponizing the young cockerels. The operation is easily learned. The instructions are so full and explicit that any one, after a careful reading and a little practice, will be able to caponize.

The object of caponizing is to largely increase the weight of fowl, and to make the meat very juicy and tender. Caponize the males when they weigh about 1½ lbs. and sell them at 8 to 10 lbs. at a "fancy price." We offer good, practical outfits. Full directions with each set.

VALENTINES.—Made of high quality materials for a local breeder, who claims it is the most practical set yet offered. Illustrated leaflet on request. Price \$3.50 postpaid.

PHILADELPHIA is O. K. and has many admirers. Price, cardboard box, \$3.00; wooden box, \$3.50.

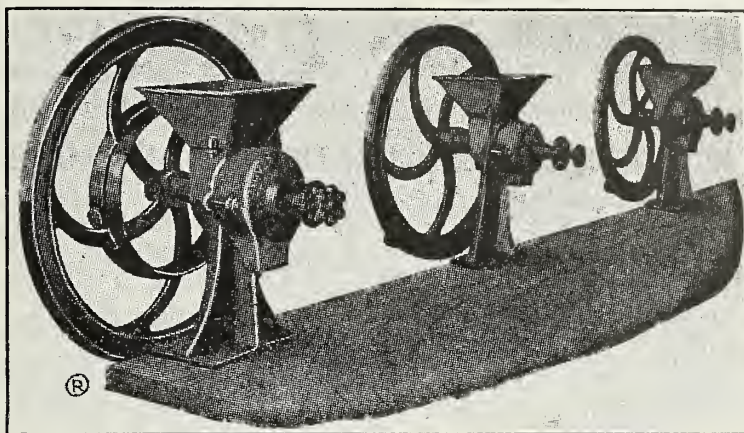
CORNELL.—One of the new sets. Highly recommended. Price \$6.00.



Keep your Poultry healthy and profitable by feeding Cholerine in Buttermilk, Sour Milk or H. Q. Wet Buttermilk Mash. You try it; we have proved it. Page 147.

STOVER GRINDING MILLS

In these mills are embodied all the good features of other hand grinding mills to which have been added universal burrs, or grinding plates, that are quickly adjusted and locked for grinding coarse or fine. These mills will grind any kind of grain or seeds, dry bone, oyster or sea shells, crockery, etc. Made of high-grade castings of tested strength and excellent finish. Not suitable for green bones. Descriptive leaflet on request.



Stover Grinding Mills

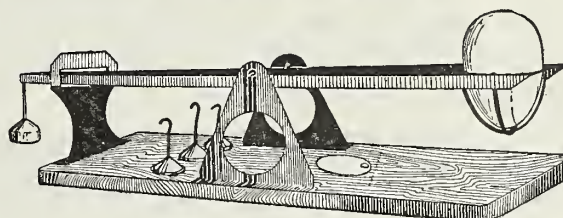
No. 32.—Has a 16-inch fly wheel and is light running; the capacity is not equaled by any other of the same size. Weight 40 lbs. Price \$8.00.

No. 32-D.—Fills a long-felt need in every kitchen or poultry yard; large capacity; has all the good features of No. 32, but is made with a clamp to fasten to table top and a hand crank in place of flywheel; 16 inches high; weight 25 lbs. Price \$7.50.

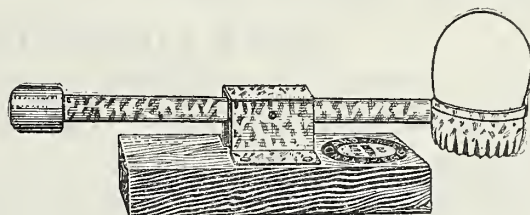
No. 33.—About the same capacity as No. 32, but of heavier construction; fitted with a hardened steel worm, larger opening, more adaptable for grinding dry bone and oyster shells than No. 32. Size of fly-wheel, 18 inches; weight 45 lbs. Price \$9.25.

No. 35.—Larger capacity than No. 33; 20-inch fly-wheel; weight 55 lbs. Price \$11.25.

No. 35-B.—This mill is equipped with combination flywheel and pulley; can be operated by hand or power with simple adjustments; weight 60 lbs. Price \$14.75.



Gilt Edge Egg Scales



Standard Egg Scale

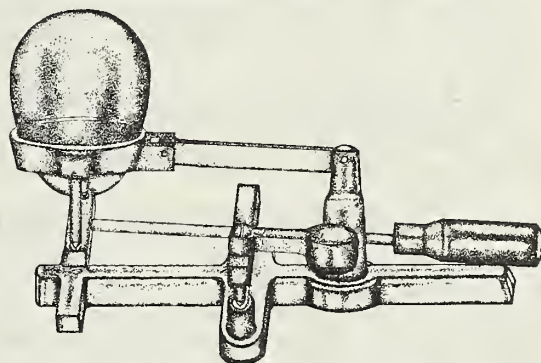
EGG SCALES

All up-to-date poultrymen are now grading their eggs. Large eggs bring extra fancy prices and more profit to the producer. The classification and grades of eggs may vary in different markets. Ask your association or exchange for grades. We understand No. 1 eggs should weigh slightly over 22 ounces so as to average 24 ounces per dozen. No. 2 grade, 19 ounces per dozen.

GILT EDGE. (See cut).—Used throughout the United States. Extra well made, yet simple in construction; quick and easy to operate; weighing capacity, 18 to 29 ounces per dozen. Price \$2.00, postpaid.

STANDARD.—Very simple in construction, yet very accurate and quick. Made in two sizes, 19 and 22-ounce grades. As they are so inexpensive and it is so handy to have the two grades all set, everyone should have one or more of each size. Price 60c each; 2 for \$1.10, postpaid. State which grade or sizes wanted.

KRESKY'S DOUBLE-SHIFT.—A new, practical, accurate and reliable scale. The balancing contacts are all case-hardened, steel-pointed pins. Will weigh CORRECTLY, no matter how the egg is placed in the cup. No loose weights or parts to get lost. Cannot get out of adjustment. This double-shift egg scale SAVES BREAKAGE because of its construction and SAVES TIME because of its SIMPLE, QUICK SHIFT, which changes weight from "Extra" to "Pullet" grade. RECOMMENDED BY ALL who have tried it. PRICE \$3.00, postpaid.



Kresky's Double-Shift

SEARCHLIGHT EGG TESTER— Portable Electric

If you have electric service this is the only egg tester to use. The demand from poultrymen who have heard of this new tester has caused us to stock it. You move the "searchlight" over the eggs; a novice can test 50 eggs per minute. The searchlight effect on the air cell illuminates the entire contents and as the germ always rises to the top it instantly and clearly appears in plain view. Weak or dead germs, blood spots, cracked shells and clear, unfertile eggs are instantly detected after the third or fourth day of incubation, up to which time eggs need not be turned.

Unfertile eggs tested out the third or fourth day have a market value. The price of this tester is soon saved. Absolutely guaranteed and used successfully by the largest California hatcheries. Price \$5.00, postpaid. DESCRIPTIVE LEAFLET ON REQUEST.



Up-to-Date Sanitary Drinking Fountains and Feeders

Increase your profits by saving the chicks. Start now by ordering sanitary, economical, up-to-date Fountains and Feeders. Note—When wanted by parcel post, add postage.

STANDARD FOUNTAINS NO. 1, NO. 2

Made in two parts, pressed out of heavy galvanized iron; will last for years. Easy to clean inside and out. (See cut.) Price, 1-qt., 40c; 2-qt., 50c; 4-qt., 75c. (Add postage at 2 lbs. each if wanted by mail.)

SANITARY STONE FOUNTAIN NO. 3

An old and popular style that keeps the water cool; see cut. (Not mailable.) Price, 1-qt., 50c; 2-qt., 75c; 4-qt., \$1.00; 8-qt., \$1.50. (Cannot send parcel post.) Store price, not packed, 45c, 65c, 85c and \$1.25.

STAR CHICKEN SERVER NO. 4

Star shaped pan, very desirable; made from 1 piece of non-rusting metal; for chick feed or water. Any size in Mason jar fits it. Price, (without jars), 15c each; postpaid 20c each; \$2.25 dozen.

OAKES CHICK SERVER NO. 5

These consist of a 6-inch scalloped pan and a collar to fit any size Mason jar. You fill the jar, screw on the pan and turn it over. Perfect for small chicks, for they can't get wet. Price (without jar), 15c each; postpaid 20c each; \$2.00 per dozen.

WALL FOUNTAINS

Very desirable for adult fowls; hang up on the wall or set on a platform out of litter and dirt; made of heavy galvanized iron.

NO. 7. CYPHER'S STYLE.—Very popular and satisfactory. Price, each, $\frac{1}{2}$ -gal. (P. P. 2 lbs.), 70c; 1 gal. (P. P. 3 lbs.), 90c; 2 gal. (P. P. $3\frac{1}{2}$ lbs.), \$1.25.

CHAMPION TELESCOPE FOUNTAINS

This is the best and most popular style. The full length telescope top pulls out, making it easy to clean inside.

NO. 8 CHAMPION.— $\frac{1}{2}$ gal., 90c; (P. P. Wgt. $2\frac{1}{2}$ lbs.); 1 gal., \$1.20, wgt. $3\frac{1}{2}$ lbs.; 2 gal., \$1.50, wgt. 5 lbs.; 3 gal., with 3 cups, \$2.65, wgt. 10 lbs.; 3 gal. with 4 cups, \$2.90, wgt. 11 lbs. (Wgts, include packing for P. P.)

GALVANIZED FEEDERS

Made of galvanized iron; soon pay for themselves in preventing waste. Sanitary, closed top self-feeders for granulated bone, beef scraps, grit, shells, charcoal, dry mash, etc. If these necessary foods are kept before your fowls they will eat just what their systems require for profitable results; in other words, properly balance their rations. Hang up out of the litter.

NO. 9 CHAMPION FEEDER.—Two compartments, one holds 3 qts., the other 6 qts. (P. P. wgt. $4\frac{1}{2}$ lbs.). Each \$1.50. (See cut.)

NO. 9-X CHAMPION FEEDER.—The same shape as No. 9, with one large 9 qt. compartment, good for dry mash. (P. P. wgt. 4 lbs.) Each \$1.35.

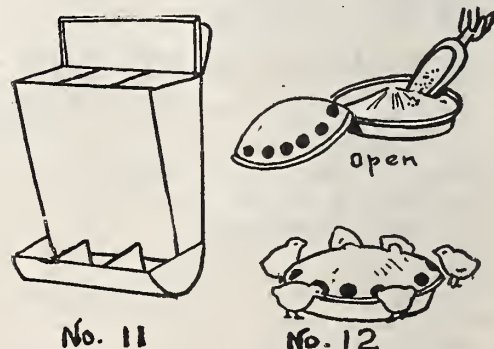
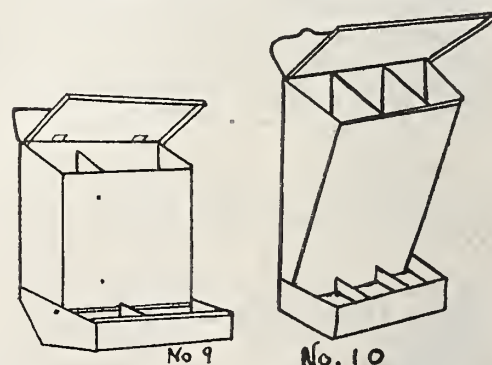
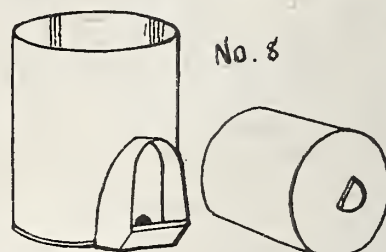
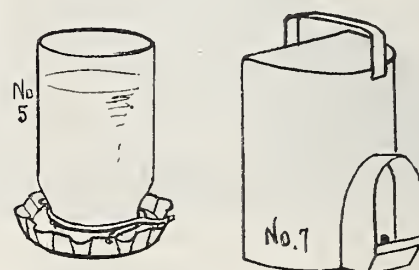
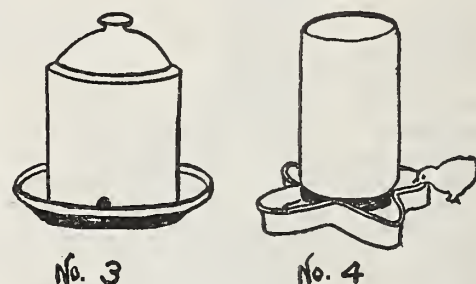
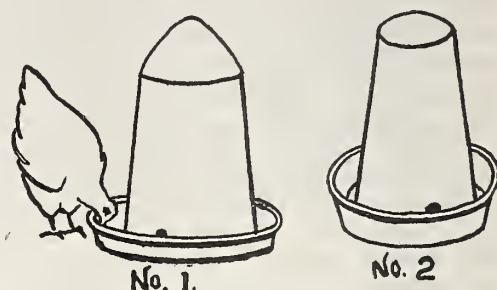
NO. 9XX CHAMPION FEEDER.—Extra large size of above style. One 12 qt. compartment. (P. P. wgt. 5 lbs.) Each \$1.65.

NO. 10 CHAMPION FEEDER.—(See cut.) Has 3 compartments, each holding about 1 qt. (P. P. wgt. 4 lbs.) Each \$1.00.

NO. 11 MOE'S.—Extra strong and well made; the feed trough at bottom is round. 3 Section, 3 pints each. (P. P. wgt. 4 lbs.) Each \$1.10. 4 Sections (P. P. wgt. 5 lbs.) Each \$1.45.

MOE'S CHICK SERVER

NO. 12.—(See cut.) Practical and a great saver of feed. Chicks cannot get into it. For water or feed. Small, Each 25c; postpaid 30c; Large (P. P. wgt. 3 lbs.), Each 35c; postpaid 40c.



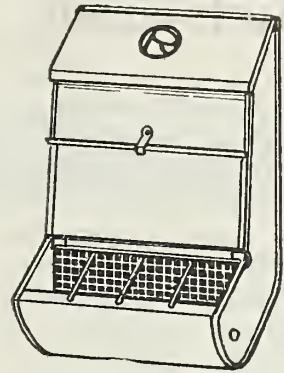
DRY MASH HOPPER

The curved bottom of the Hopper keeps the feed within easy reach of the birds. The gradual enlargement from the top to base prevents clogging. The wire grid and the wires running from the flange through the wire grid prevent any chance of the fowls throwing out or wasting the feed. The sloping cover prevents the birds from roosting on the Hopper and when both covers are closed, it is rat and mouse proof. A trial will convince you that it is a Hopper of the greatest merit. Made of heavy galvanized iron.

No. 35. 8½ in. wide, capacity 12 qts. (Wgt. 4½ lbs.) Each \$1.75.

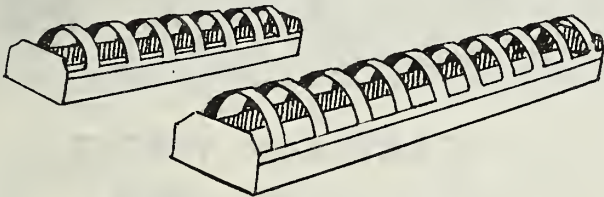
No. 36. 12 in. wide (Wgt. 7½ lbs.), capacity 18 qts. Each \$2.25.

No. 37. 24 in. wide (Wgt. 12 lbs.), capacity 36 qts. Each \$3.25.



No. 36 Mash Hopper

SANITARY FOOD HOLDERS



Sanitary Food Holders

12-in. Chick size (P. P. wgt. 1¼ lbs.).....50c

18-in. Chick size (P. P. wgt. 2 lbs.).....75c

For Poultry and Ducks of All Ages.—They are especially recommended for use in feeding mashes of any kind; steamed alfalfa or sprouted oats or dry grain. Saves 15 to 25 per cent in foodstuff. The top-guard keeps the fowls out, is removable, making them very easy to clean. Made of heavy galvanized iron; safe, sanitary, saving and serviceable.

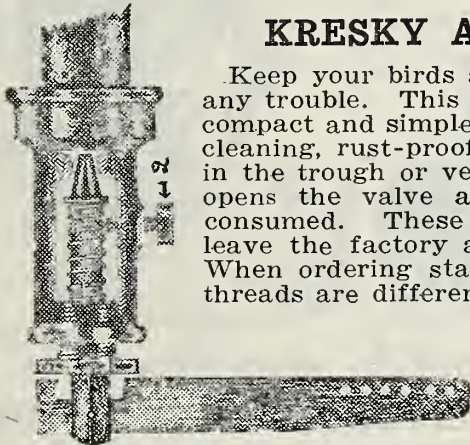
24-in. Hen size (P. P. wgt. 2½ lbs.)....\$1.25

30-in. Hen size (P. P. wgt. 5 lbs.).... 1.50

KRESKY AUTOMATIC WATER VALVES

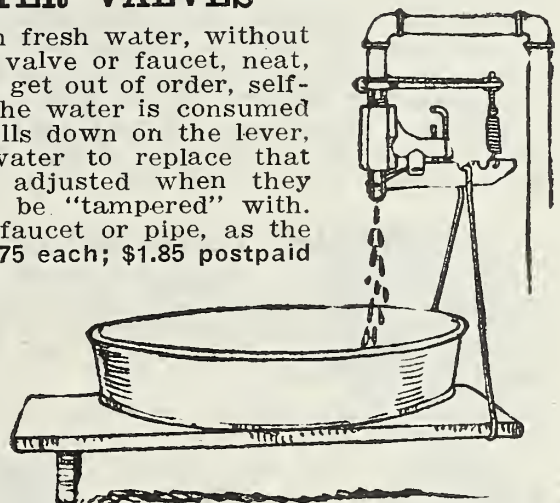
Keep your birds and stock supplied with fresh water, without any trouble. This is the latest and best valve or faucet, neat, compact and simple in design. Nothing to get out of order, self-cleaning, rust-proof and long lived. As the water is consumed in the trough or vessel below the float pulls down on the lever, opens the valve and releases enough water to replace that consumed. These valves are properly adjusted when they leave the factory and SHOULD NEVER be "tampered" with. When ordering state whether for ¾-in. faucet or pipe, as the threads are different.

Price: \$1.75 each; \$1.85 postpaid



Kresky's Automatic Water Valve

These are
great
labor-
savers



THE "GUARANTEED" AUTOMATIC WATER FOUNTAIN

The makers claim all the best features known are built in this fountain. Fills the pans or trough so full and no more. Equipped with a governing stem or screw that controls the water flow automatically and locks or acts as cut-off if weight of trough is removed. (See cut.) Descriptive leaflet on request. Price, \$1.50 each; \$1.60 postpaid. PIPE CONNECTIONS to fit ½ or ¾-in. pipe 25c extra.

VEGETABLE RACK AND FEEDER FOR POULTRY AND RABBITS

Just the thing for feeding greens, beets, cabbage, kale, etc. Don't throw them on the ground or litter. This feeder holds them firm and the birds pick through the front wires. See illustration. Sanitary and worth the price. 9 inches wide, 13 inches high. (P. P. wgt. 2½ lbs.) Each 80c.



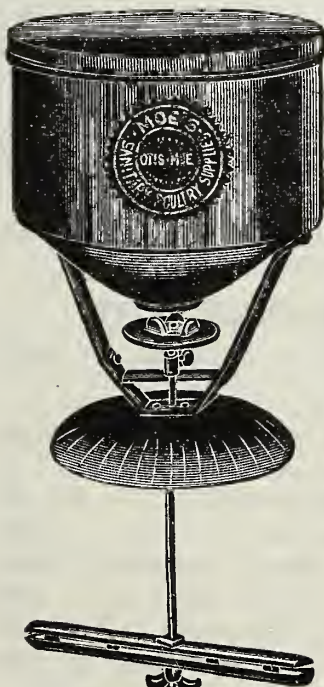
Vegetable Rack

MOE'S FEEDER AND EXERCISER

The best combined feeder and exerciser. Cannot clog. Swinging deflector scatters the grain all around, a little at a time. Holds enough to be of real service. Can be set to feed little or much. Hang in the scratching pen with straw on the floor. With this feeder, a good water fountain and dry mash hopper, you can leave your chickens for a day or two and know that they are provided for.

No. 52, holds 8 qts., 22 in. high, wgt. 5 lbs. Each.....\$1.75

No. 53, holds ½ bu., 28 in. high, wgt. 9 lbs. Each.....\$2.50



Moe's Feeder

DAD'S ELECTRIC LANTERNS.—Every poultry keeper needs one. It's always ready—no danger of fire; makes a REAL LIGHT. See page 129.

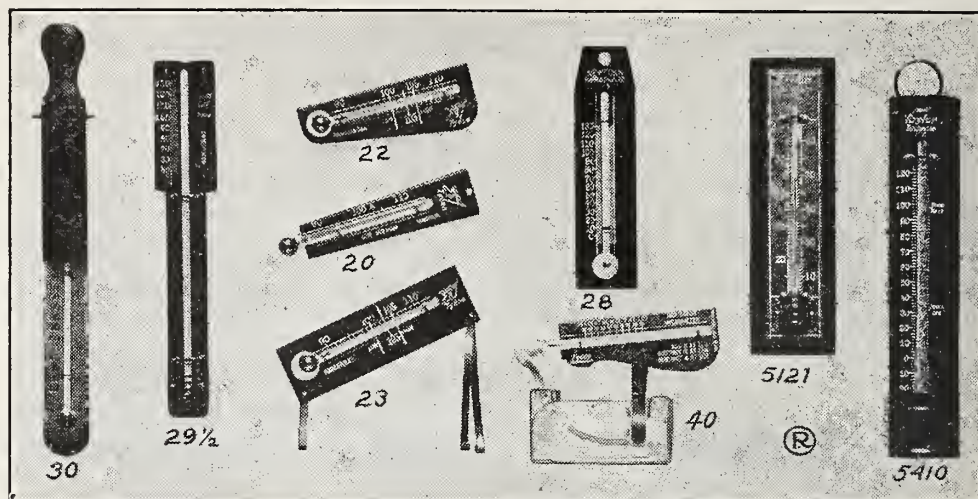
High Grade

THERMOMETERS

Tyco's Tested

Without a reliable, accurate thermometer an incubator is practically worthless. Hundreds of hatches fail every year because of inferior thermometers and large numbers of brooder chicks are destroyed for the same reason.

We sell the "Tyco's" tested, recognized as the most dependable.



INCUBATOR THERMOMETERS

TYCO'S CERTIFIED.—Same style as No. 22. Scale is etched on glass tube as well as metal back. "Certified correct," worth the price. Each \$1.50.

NO. 22 "TYCO'S".—Very popular. Generally suspended on string or wire on level with eggs. Each \$1.25; wire hanger, 10c extra.

NO. 22 1/2 MODEL.—Same shape as No. 22, but not as high grade. Each \$1.00.

NO. 20.—"Tyco's Tested," used in Buckeye and Queen incubators. Each \$1.25.

NO. 23 TYCO'S.—Has folding legs, adjustable; to be set up in egg tray. Postpaid \$1.25; Model, same style, 75c.

Brooder Thermometers

NO. 29 1/2.—Tyco's high-grade white figures on black metal scaled from 60 to 130 above; temperature readable from above the hover. Used in Economy, Buckeye or any brooder. Postpaid, each \$1.50.

NO. 29.—Same style, silver face, black figures. Price \$1.25.

NO. 30 (see cut).—Long, round, wood holder. Used in Cypher's Adaptable or Portable hovers, also brooder houses. Postpaid, each \$1.00.

NO. 28 NEWTOWN (see cut).—To hang under the large hover; high grade, desirable style; scaled.

KRESKY'S SPECIAL.—Extra large. Price \$1.00.

NO. 5120.—For general household use or brooder houses. Scaled from 10 below zero to 120 above. Metal face, wood back, 8 inches. Price \$1.50.

NO. 5121.—Same as above; scaled from 10 above zero to 100 above. Price \$1.25.

NO. 5420.—Black japanned, 8-inch case; scale ranges from 20 below to 120 above. For household or brooder house. Price \$1.25.

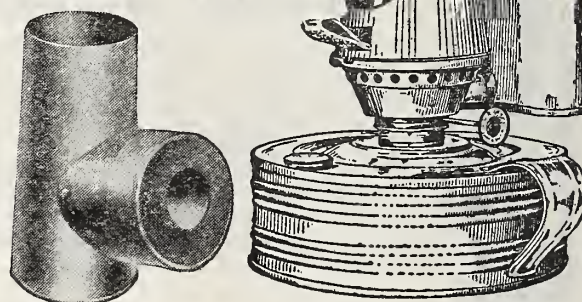
INCUBATOR HYGROMETERS

NO. 40 (see cut above).—"Moisture Indicator." Millions of chicks die in the shell every year for want of proper moisture conditions. Use a Hygrometer to show you proper conditions. Price with full directions, \$2.25. Extra wicks, 15c each. Descriptive booklet on request.

X-RAY EGG TESTER

Used to test fertility of eggs and show size of air cell during incubation. Use on an ordinary lamp (No. 2 burner), in a dark room.

Price, postpaid, 60c



X-Ray

Oake's Safety Lamps

OAKE'S HYDRO SAFETY LAMPS

Made especially for incubators and brooders. Fill the water jacket full of cold water to keep the oil and burner cool and perfectly safe. Economical and satisfactory in every way. The best incubator and brooder lamp made.

No. 1—7 1/2 in. high; 5/8 in. wick (P. P. wgt. for mailing, 1 1/2 lbs.).....\$1.50
No. 2—8 in. high; 1 in. wick (P. P. 2 lbs.) 2.00
No. 3—9 in. high; 1 1/2 in. wick (P. P. 3 lbs.) 2.25
 Add postage for mailing.

LAMPS, BURNERS, ETC.

Queen Lamp, 6x4 inches, complete.....\$2.50
 State size of burner or wick wanted.
Queen Lamp, 7x10 inches, double burner for 25, 35 or 45 incubator..... 4.50
Queen Lamp Burners (state size)..... 1.00
Queen Lamp Flue (chimney)..... .50
Queen Wafer Regulator 1.25
Cypher's No. 2 or 3 Lamps, complete.. 3.25
Cypher's Lamp Burners, Nos. 2 or 3.... 1.25
Cypher's Gas Heaters (Burners)..... 1.25
Lamp Wicks (state size), each 5c; doz. .50

QUEEN REPAIRS OR EXTRAS.—We have an illustrated and descriptive booklet giving price list of repair parts and fixtures for all models, old and new. Free on request.

Leg Bands for Poultry and Pigeons

Mark your different birds so you can tell certain stock or strains. Every bird must be marked with a numbered band before it can be entered in a show.

Champion Adjustable

This is our most popular numbered band. Put up in packages numbered 1 to 12, 13 to 25, 26 to 50, 50 to 100, and boxes 101 to 200, 201 to 300, and in even hundreds up to 1,000.

NOTE.—We do not break these packages.

PRICES: 12 for 20c; 25 for 35c; 50 for 60c; 100 for 80c; 500 up at 70c per 100.



This band (see illustration above) is made in one piece and adjustable to fit any fowl. They will stay where you put them. Held by double lock. Made of aluminum with raised figures. Not made for baby chicks or pigeons. After fitting, clip surplus end off with shears.

Colored Spirol Leg Bands

You have no ends to fasten together—made on the same principle as a key ring. Once put on they stay till taken off and do not chafe the leg. The ease with which these bands are used will be a revelation to the man who has used other style leg bands. And, best of all, they can be used again and again.

Durable, Practical, Economical. They provide instant identification without handling the birds. You can identify birds as far as you can distinguish colors, which will show you according to your markings the early or late hatched pullets, the yearlings or two-year-olds, your different matings, and so on. Fine for baby chicks. Made in ten colors: Red, White, Pink, Yellow, Light and Dark Blue, Black, Purple, Green and Garnet. They do not fade and are weather-proof. We offer Highest Quality only.

Order by Number, and State Color Wanted

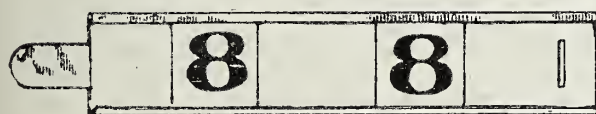
NOTE.—No. 1, Baby Chicks; No. 2, Pigeons and Bantams or half-grown chicks; No. 3, Leghorns, all Mediterraneans and Spanish; No. 4, Rocks, R. I. Reds and American classes; No. 5, Asiatic classes and Ducks; No. 6, Asiatic Males, Turkeys and Geese.

PRICES: Any Color Poultry Size.—12 for 20c; 25 for 35c; 50 for 60c; 100, 90c; 500, up at 80c per 100. Postpaid.

BABY CHICK Size.—12 for 20c; 25 for 30c; 50 for 50c 100 for 65c; 500 up at 60c per 100. Postpaid.



SPIRAL



No. 8—Economy

No. 7—Sure Clinch



ECONOMY COLORED POULTRY BANDS

Handsome, two colored, $\frac{1}{2}$ inch wide, aluminum back, celluloid face, well made and durable. Large, plain, double numbers from 1 to 300 in red, green, pink, blue and black. Fasteners very secure if doubled back and pressed tight. We can supply these only in Leghorn and Rock sizes.

Prices: 12 for 35c; 25 for 60c; 50 for \$1.00; 100 for \$1.75, postpaid.

ECONOMY COLORED PIGEON BANDS

Same width and style as above, with double numbers up to 100; single numbers above 100, as the band is not long enough to take the large numbers. Same colors as above. This band comes in pairs only.

Prices: 6 pair (12 bands) 30c; 25 pair 75c; 50 pair \$1.40.

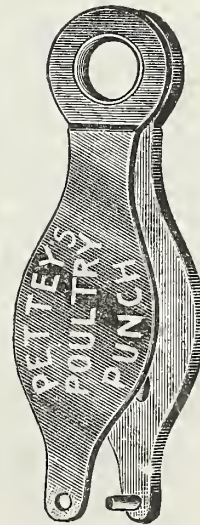
SURE CLINCH ADJUSTABLE BANDS

This new aluminum band is very neat, smooth and well made, $\frac{3}{8}$ inch wide, adjustable to 3 sizes. Note the 3 holes in illustration. We offer this band as superior to the old-style double clinch. Numbers from 1 to 1,000.

Prices: 12 for 20c; 25 for 35c; 50 for 60c; 100 for 85c; 500 up at 75c per 100.



Stearns' Poultry Marker



POULTRY MARKERS

Used for marking the web between the toes of baby chicks, if you wish to know different strains or stocks. Colored leg bands are now more popular.

Petty's—(See illustration.) Postpaid, 25c
Stearns'—(See illustration.) Postpaid, 40c

Routledge H. Q. Poultry Feed

"H. Q." DENOTING HIGHEST QUALITY

"The Feed That Proves You Fed"

It has always been our aim to supply the poultry-keeper the best feeds and supplies obtainable and now we offer you a line of Poultry Feeds that our years of experience lead us to believe will please the most critical and prove the most economical and profitable to use.

We have planned a long time to offer Poultry Feeds under our own brand and formulas, but before doing so, had to prove it correct—prove that it would give better results at a less cost than others now on the market. We figure if one can't go a little further and do a little better than the other fellow, we can't expect big results. Give our Feed a fair trial and we are confident you will then agree that we have gone a long way in helping you to success. Quality and analysis guaranteed on all our Feeds.

PRICES: Poultry food prices SUBJECT TO MARKET CHANGES in grains and are continually changing. We keep our prices low as possible. WRITE OR PHONE FOR LATEST PRICE LIST.

OUR 25c AND 50c PACKAGES are put up DAILY at only a small advance over 100-lb. prices. FULL VALUE.



Look for this style sack,
"machine sewed" top.
TAKE NO OTHER.

H. Q. SPECIAL CHICK STARTER

Feed After 48 Hours to 10 Days

ROUTLEDGE SPECIAL H. Q. CHICK STARTER. The first few days, that is, after at least 48 hours from the shell, a chick should have a very light diet. Regular chick mashes are too strong. Routledge H. Q. Special Chick Starter is to be fed the first three to four days exclusively. Feed very sparingly four to five times daily on paper plates. Add a pinch of Chick Grit to every plate, but do not over-feed on Grit. When chicks are four days old, alternate with Routledge H. Q. Chick Scratch. When one week old gradually change from H. Q. Special Starter to Routledge Buttermilk Chick Mash in addition to "Chick Scratch."

Prices: 25c and 50c pkgs.; 100 lbs., write.

H. Q. CHICK SCRATCH

Feed After 60 Hours to 8 Weeks

ROUTLEDGE H. Q. CHICK SCRATCH. It is vitally important to feed baby chicks only the purest of grains. Weed seed and undeveloped or shriveled grains are like poison to chicks. Avoid trouble and a death loss by feeding only Routledge H. Q. Chick Scratch—it's extra clean and contains only the purest of grains. Should be fed several times daily in addition to our Buttermilk Chick Mash.

Prices: 25c and 50c pkgs.; 100 lbs., write.

Get our free pamphlet on Care and Feeding of Baby Chicks.

H. Q. DEVELOPING SCRATCH

Feed from 8 Weeks to 4 Months

ROUTLEDGE H. Q. DEVELOPING SCRATCH is a combination of cracked grains between Chick Scratch and Scratch Feed. It is especially made to feed growing chicks from eight weeks to four months. This feed contains the ingredients necessary to build tissue and fibre, and should be fed along with Routledge H. Q. Developing Mash to produce vigorous birds. It's a feed that's right.

Prices: 25c and 50c pkgs.; 100 lbs., write.

H. Q. BUTTERMILK CHICK MASH

Feed from 10 Days to 8 to 12 Weeks

ROUTLEDGE H. Q. BUTTERMILK CHICK MASH. We are not guessing when we say this is one of the best "if not the best" on the market today. It contains the very best grade of digestible ground grains with dried buttermilk added. The quality of ingredients is equal to any used for human consumption. Feed after 10 days, starting gradually and increasing slowly until they have it before them in dry form continually when two weeks old. Feed in addition our H. Q. Chick Scratch in straw litter three times daily. This combination should be fed for 8 to 12 weeks—then follow with Routledge Developing Mash and Developing Scratch.

Prices: 25c and 50c pkgs.; 100 lbs., write.

H. Q. DEVELOPING MASH

Feed from 8 Weeks to 6 Months

ROUTLEDGE H. Q. DEVELOPING MASH. Growing chickens require a mash that is rich in food value for growing muscle, bone and a strong, vigorous body—nature will do the rest. Rich protein or pasty feed is very detrimental. Start feeding Routledge H. Q. Developing Mash at 8 weeks, gradually increasing until fed straight at 12 weeks and on until pullets are six months old, then gradually change to Egg Mash. Routledge H. Q. Developing Mash and Developing Scratch will produce vigorous, healthy pullets that will enter the laying year in the prime of condition. There is no substitute for Routledge H. Q. Feeds.

Prices: 25c and 50c pkgs.; 100 lbs., write.

H. Q. BUTTERMILK DEVELOPING MASH

Fed Same as Developing Mash

ROUTLEDGE H. Q. BUTTERMILK DEVELOPING MASH. The same high grade feed as our plain Developing Mash, only we add the proper amount of high grade Dried Buttermilk. It is highly recommended to be fed where liquid buttermilk is not obtainable. The chickens relish it and thrive on it.

Prices: 25c and 50c pkgs.; 100 lbs., write.

FEEDING.—Scatter all grain feeds in straw and keep all Mashs in dry form, in Automatic Feeders before your poultry at all times.

Routledge's "Highest Quality" Poultry Feeds

PRICES: Poultry food prices SUBJECT TO MARKET CHANGES in grains and are continually changing. We keep our prices low as possible. WRITE OR PHONE FOR LATEST PRICE LIST.



Our H. Q. Feeds are all put up in printed sacks, as shown above, and "machine sewed." Take no other.

OUR 25c AND 50c PACKAGES are put up DAILY at only a small advance over 100 lb. prices. FULL VALUE.

H. Q. Dried Buttermilk

For Poultry, Pigs and Hogs

This year we are using and selling Dried Buttermilk in place of semi-solid. It answers every purpose and will never spoil if kept in a dry place. The lactic acid contained in this product we offer is unsurpassed.

Mix 5 to 7 lbs. to 100 lbs. of ground feed or mash and it will give wonderful results. Out-of-town customers who cannot secure prepared Buttermilk Feeds but get the ground mill feeds, can prepare their own Buttermilk Mash.

Price per lb. 15c; 10 lbs. \$1.25; 20 to 50 lbs. at 12c; 100 lbs. \$10.50.

Prepared Buttermilk Semi-Solid—Lactein Etc.

We are not listing any brand of prepared buttermilk this year due to the fact that we cannot find any that meets with the requirements we know to be necessary to give best results. Most of it "goes bad" unless kept "just right."

If you want any brand sold on the market, we will obtain and ship same to you at regular Portland market price quoted by other dealers. We hope to have "a new brand" in the near future that is properly made that we can recommend and back up as we do our other lines, but until that time we do not recommend or list any particular kind. Try our H. Q. Dried Buttermilk above, or perhaps you can secure fresh buttermilk near home, but be sure it has not been treated. More information on request.

H. Q. SCRATCH FEED

Feed from 4 Months On

ROUTLEDGE H. Q. SCRATCH FEED. It's different and better than most others. It does not contain "filler" or grains like Kaffir, Milo-Maize and Egyptian or any shriveled grains. It is a clean, wholesome feed that the chickens relish and eat all of it. No waste. It builds the body and egg organs up so the hen lays eggs because she is in prime condition. Experienced poultrymen recognize it as the best Scratch the market supplies.

Prices: 25c and 50c pkgs.; 100 lbs., see note above.

H. Q. EGG MASH

Feed from 6 Months On

ROUTLEDGE H. Q. EGG MASH. Fills a long-felt want for an Egg Mash that is made only of such grains as contain egg-building materials in sufficient quantity without any filler or heavy fibre contents. Hens fed this Mash will eat the proper amount without harmful effects and will surely shell out the eggs. It contains the highest quality of materials possible to buy and is ground just right to give best results. The animal protein is extra fine quality, not fertilizer grade. Quality and analysis guaranteed on all our feeds.

Prices: 25c and 50c pkgs.; 100 lbs. up, see note above.

H. Q. BUTTERMILK EGG MASH

Feed from 6 Months On

ROUTLEDGE H. Q. BUTTERMILK EGG MASH is the same correct formula as our Egg Mash with a very high grade Dried Buttermilk added to it. The action of Buttermilk is very beneficial to the hen, providing it is the right quality and amount. This feed has proven its merits and we recommend it highly. Prices: 25c and 50c pkgs.; 100 lbs., see note above.

Ever Think About This?



GEORGE SAYS: "Not only feed alone, or its quality, can always solve the problem of egg production, but the way and the amount of it that is fed is a large factor, also the method of housing the hens, as well as the housing and method of brooding the hens when they were chicks, enter into the success or failure as

much or more than the feed, for no improperly fed or brooded chick can develop into a high-class laying hen, and regardless of the feed or feeding methods she cannot be changed a great deal after full development has been attained, but by intelligent feeding of certain kinds of feed and knowing your hens, it is possible to get the highest amount of production without breaking down your hens, hence our effort for many years past has been to find the true conditions the poultry-keeper is confronted by and work out the remedy."

On these very important subjects is where George can be of great service to you.

Our H. Q. Poultry Feeds and Remedies, all worked out and perfected by our "Expert Poultryairian," George L. Routledge.



FEEDING.—Scatter all grain feeds in straw to make them scratch and keep all Mash in dry form in Sanitary Feeders (see page 141) before your poultry at all times.

Routledge H. Q. Poultry Feeds—Continued

Don't invite disease and loss by using old pans, open dishes or wooden troughs. See page 141.



The poultryman who feeds the "Highest Quality" poultry foods, even though it is a little higher in price, makes more profit than he who is content with cheap mixtures or low grade grains because it costs less.

The demand for our poultry foods is enormous among the poultry raisers, for they have found out that we supply only highest quality foods. They also appreciate the fact that we give them wholesale prices in 5, 10 or 20-bag lots. We have no dealers to protect.

ABOUT PRICES: All prices are subject to important market changes and F. O. B. Portland. Write for latest Price List or order at following prices. If prices have dropped we will refund, if higher we will bill you for balance due if you'll remit. Instruct us, please.

FISH MEAL—H. Q.

The grade we sell is the best obtainable, it contains nothing but pure fresh fish properly processed and will not taint the eggs. Fish Meal is rapidly taking the place of Beef Scraps, Beef and Meat Meal, Blood Meal, etc., as it contains more available animal protein.

Prices: 5 lbs., 35c; 10 lbs., 65c; 50 lbs., \$2.25; 100-lb. sk., \$4.25; 5 to 20 sacks at \$4.00.

BEEF SCRAPS

Our "Highest Quality" beef scraps are rich in materials which make bone, muscle and lean meat. They insure health, thrift and vigor, and satisfy the natural craving of the bird's system for flesh-food in some form. Rich in protein. Can be fed dry or with cooked rations. Don't waste any, feed in one section of Sanitary Feeder. See page 140.

Price: 1b., 10c; 5 lbs., 45c; 10 lbs., 75c; 50 lbs., \$3.00; 100 lbs., \$5.75; 5 sks. up at \$5.50.

GRANULATED BONE—"SPECIAL"

We offer only highest quality, white, pure and clean. Rich in phosphates, lime and protein. Should be kept before your chickens at all times. Feed in a Sanitary Shell and Grit Box. (See page 140.)

Price: 5 lbs., 25c; 10 lbs., 50c; 100-lb. sk., \$3.10; 5 to 20 sks. at \$3.00.

OYSTER SHELL, CRUSHED

Best grade pure hard Eastern oyster shell, crushed and sifted. Supplies lime material for egg shells. Does not take the place of Grit as some think. Hens must have both shell and grit. Oyster shells should be within reach of your hens at all times.

Price: 3 lbs., 10c; 8 lbs., 25c; 100-lb. sk., \$1.75; 5 to 20 sks. at \$1.65.

POULTRY BOOKS.—New and up-to-date, worth many \$, for 1½. See page 128.

GRIT—Best Grade

Every poultry raiser should keep a supply of this grit in each pen. Baby chicks and ducklings must have it. Made in three sizes, chick, pigeon or broiler and hen size. We always send hen size unless otherwise ordered.

Price: 4 lbs., 10c; 12 lbs., 25c; 100-lb. sks., \$1.50; 5 to 20 sks. at \$1.40.

CLOVER OR ALFALFA MEAL

The best substitute for green food for winter feeding; helps keep the egg basket full; mixed with the soft feed is good for large or small chicks; endorsed by leading experts.

Price: 1 lb., 10c; 5 lbs., 25c; 100 lbs., \$2.50.

CHARCOAL

Our stock is prepared especially for poultry and of highest quality obtainable; a preventive of bowel trouble, sour crop and indigestion; a health preserver. State size wanted. A for mash, B for chicks, C for large chickens or hens.

Price: 1 lb., 10c; 3 lbs., 25c; 10 lbs., 75c; 50 lbs., \$2.50; 100 lbs., \$4.75.

POULTRY PEPPER

A good tonic and invigorator. Ground.

Price: 1 lb., 30c; 5 lbs., \$1.35; 100 lbs., \$25.00.



Routledge Lice and Mite Liquid

KILLS BY CONTACT.—We recommend this liquid for use in poultry houses, barns, stables, coops, etc., as a killer and preventive. Spray walls, crevices and corners where they hide and breed.

FOR LICE AND MITES paint the roosts and spray thoroughly the drop boards and walls to kill the mites and eggs. It penetrates and lasts. Used occasionally and thoroughly it will absolutely keep the houses free of mites or lice.

Spray or paint the inside of nest boxes once every thirty days. This also helps to keep the lice off the hens. It will not taint the egg.

FOR FLIES.—It is excellent as a "Fly Spray" and it really "Kills 'Em." Spray lightly over the animal twice a day. Do not soak the hair clear to the skin, as too strong a use might be harmful. Spray the stable before milking time.

FOR MOTH OR WEEVIL.—In drawers or bins where seeds, feeds, etc., are kept, paint inside with Routledge Mite and Lice Liquid once every six months to keep the weevil and moth out. It does not destroy germination of seeds or hurt the feeds after it gets dry.

GUARANTEE.—If after using Routledge Fly, Mite and Lice Liquid you are not satisfied, we will refund the money cheerfully. Use as directed.

PRICES.—By Express or Freight (not mailable), Quart cans, 50c; 2-quart cans, 80c; gallon, \$1.35; 5-gallon, \$6.50; 10-gallon (2 5-gallon cans in case), \$12.00.

Oculum for Poultry

We have sold this for several years and have many customers who praise it highly. "Oculum" is not a stimulant but is a scientific germicide. It destroys disease germs in the bowel and keeps fowls healthy.

Feed one drop of "Oculum" a day to each grown fowl (or 10 drops to each pound of feed), 5 drops to a quart of water. A teaspoon holds 60 drops.

Mix the "Oculum" with water (just enough to sprinkle), and sprinkle the feed with the mixture, stir it and cover it up and the "Oculum" will penetrate the feed in thirty minutes.

PRICES: Trial size, 1 oz. (240 feeds), 15c; 50c bottles, 60c postpaid; \$1.00 bottles, \$1.10 postpaid; by Express, Pints, \$2.00; Quarts, \$4.00; Gal., \$10.00. Extra Glass Syringes, 15c.

Ask for pamphlets giving full information and testimonials.

Oculum Oil for Stock

"Oculum Oil" is a scientific germicide for animals. Used in feed, it kills germs and worms in the organs of animals.

Sick hogs and sick sheep quickly relieved by its magic power. Sick horses and sick cattle made well again by its use.

PRICES: Trial size, 60c, or Half Pint, \$1.15, postpaid; by Express, Pints \$1.50; Quarts, \$2.50; Gal., \$7.50.

SPECIAL SYRINGE FOR ANIMALS, 25c.

CHOLERINE

The Greatest Specific and Conditioner for Poultry.

Millions of Baby Chicks Die Annually. White Diarrhoea kills them.

White Diarrhoea is a Germ disease. Science has proven this, and has located the microbe. This disease is not only prevented but eradicated by CHOLERINE.

Chick "Life Insurance" is cheaply bought by using Cholerine.



CHOLERINE.—The greatest specific and conditioner for poultry. We highly recommend it. Fowls fed Cholerine will keep healthier and produce more eggs during the season. The mortality will be much less and they will go through the moulting season in far better condition.

For Baby Chicks.—We recommend it as a preventative and specific for white diarrhoea, coccidiosis (bloody diarrhoea), cholera, roup, limber neck and other germ diseases, intestinal troubles, indigestion and worms. Use it from the start as a preventative. Feed Cholerine in sour milk or buttermilk daily for four days at the rate of two tablespoonfuls to a gallon of buttermilk—water will answer. After the fourth day, feed Cholerine three times a week as long as you keep them. It will pay big returns. They will brood better and have more "pep" and grow into more profitable birds.

For Laying or Breeding Fowls.—Feed in sour milk or buttermilk as first choice and a moist mash or water as second choice. Use six tablespoonfuls Cholerine to one hundred birds, a pint to five hundred birds, three days a week. Many of the largest poultrymen on the Coast and throughout the United States are continuous feeders of Cholerine. We recommend it, for indigestion, liver and kidney troubles in fowls and as an excellent preventative of pox, roup, worms and kindred diseases. It will aid fowls to obtain full nutriment of food consumed.

PRICES: 6 oz. bottle 35c; postpaid 45c; 16 oz. bottle 65c; postpaid 75c; 1 gal. \$2.50, 5 gal. \$11.25, 10 gal. \$20.00. Full directions on each container. Barrels—prices on request.

DAD'S ELECTRIC LANTERNS.—Every poultry keeper needs one. It's always ready—no danger of fire; makes a REAL, BIG, BRIGHT LIGHT. See page 129.



CALF MEAL

"HIGHEST QUALITY"

AN-FO CALF MEAL is a food that nourishes calves practically as good as whole milk at one-quarter the cost. Start calves on whole milk, leave out the milk a little at a time, replacing with AN-FO Calf Meal and water. When four weeks old all calves need is AN-FO Calf Meal, water and hay. **AN-FO CALF MEAL** is the richest in fat food. Used with skim milk it substitutes other digestible fats for the butter fat, making a food closer to whole milk in food value. **AN-FO CALF MEAL** does not scour, but acts to stop scour.

Prices: 25-lb. sacks, \$1.50; 50-lb. sacks, \$2.75; 100-lb. sacks, \$5.25. Sample, 10c.

PINE-OL—PINE OIL

Wonderful Germicide

Disinfectant, Germicide, Deodorant, Antiseptic. Has Fragrant Pine Odor

Emulsifies in water. One part Pine-Ol to 100 of water makes a solution sufficiently powerful for ordinary use. Adapted for Stock Farms and Poultry Ranches; also in Hospitals, Sanitariums and similar institutions. Excellent for home use.

PINE-OL has many uses, but the chief one for the poultryman is in connection with coids, roup, canker, chicken pox, etc. We recommend it highly.

PRICES: 35c and 60c bottles; Gal. 90c. Full directions with each container. Quantity prices on request.

Other Germs Remedies

GERMO LICE POWDER.—Most effective lice powder on the market. Highest per cent of active ingredients. **Prices:** 1/2-lb. cans 60c; 1-lb. can \$1.00; 5 lbs. \$4.75. Postage extra.

GERMO ROACH POWDER.—Will rid your place of roaches or water bugs if used according to directions. **Prices:** 2 1/2 oz. 50c; 1-lb. cans \$1.50; 5 lbs. \$7.00. Postage extra.

GERMO RAT KILL.—A very superior powder, mixed as directed and placed where rats and mice can get at it will make them disappear like magic. **Prices:** 3-oz. can 50c; 7 oz. \$1.00. Cannot be mailed.

Baby Chicks, Poultry and Eggs, Pigeons, Etc.

We'll send you any priced stock you want. Remember, Quality makes the price

Baby Chicks

Routledge "Egg Producing Strain"

We are giving special attention to the three leading breeds: S. C. White Leghorns, Barred Plymouth Rocks and Rhode Island Reds. Our special stock will come from flocks that are **PROPERLY MATED** and have passed our inspections for **TYPE, VITALITY** and **PRODUCTION**.

NOTE.—No shipping order accepted for less than 50 chicks and all chicks shipped direct from incubator on days hatch is off. We will not ship weak chicks.

Single Comb White Leghorns

EGGS.—Per setting, 15, \$2.50; 100, \$14.00.

BABY CHICKS.—Doz. \$3.25; 100, \$25.00; 1000, write.

Single Comb Rhode Island Red White or Barred Rocks

EGGS.—Setting, 15, \$3.00; 100, \$15.00.

BABY CHICKS.—Doz., \$4.00; 100, \$30.00; 1000, write.

TERMS.—Order early and be sure of stock. We want 10 per cent deposit with order, and balance 10 days before delivery, or if sent C. O. D. for balance, you pay for collection.

NOTE.—Don't expect eggs or stock by return express, for it takes several days, sometimes, to get them in from the farm. We guarantee safe delivery of eggs or birds to any express office, and notify you before sent.



Poultry, Pigeons, Etc. All Breeds in all Classes

We are in a position to supply you with most any breed of fancy pure bred poultry, eggs or breeding stock. We know good stock and who keeps it, and due to our business connections can generally get our pick of the breeder's flock, so when you need any, give us your order and we will select the best bird possible for the money you wish to pay and will ship it **guaranteed to please you**.

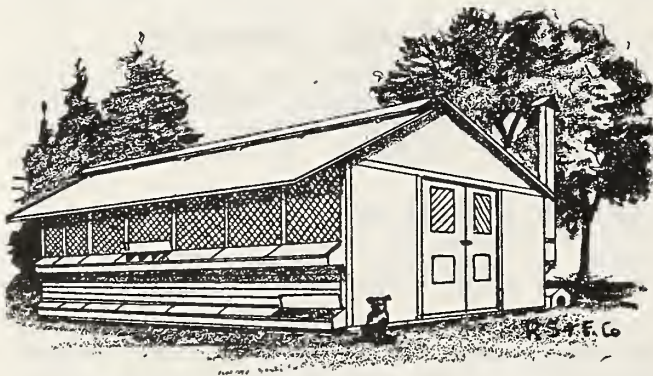
REMEMBER, high class egg producing or show type cost more than birds of ordinary purity, and the cock bird represents over 50 per cent of the breeding value.

PRICES.—Good Utility Stock for Egg Production, range as follows: **MALES**—\$7.50 to \$15.00 each; **FEMALES**—\$2.50 to \$3.00 each.

FANCY SHOW BIRDS by quotation.

Routledge Poultry and Brooder House Plans

A great many of these houses have been built in Portland. You can look through them if you intend to build. By Geo. L. Routledge—Expert Poultryairian



Routledge Model Poultry House

ROUTLEDGE BROODER HOUSE

In general construction and outside appearance it is similar to our Model Poultry House, but the inside, of course, has special ventilation and extra constructions—two rooms, one used for the brooder stove and the other as cooler, feeding and exercise room. Both rooms have adjustable ceiling and a panel front so that after chicks do not need stove heat, the house is made into a roosting and rearing house, and later a laying house if you wish. In other words, it is a "3-in-1", house, brooding, rearing and laying. We constructed several of these last spring and they have proven economical and very successful.

Remember—For profitable and satisfactory results baby chicks must be correctly hatched, brooded, fed and reared.

The incubator, the brooder, the ventilation of the brooder house and the feed are mighty important.

LET US HELP YOU with your poultry problems—start you right. Our experts will give you very valuable service. **WE WANT YOU TO SUCCEED.**

Five Dollars Worth for One

We have made large **Blue Print Plans** of both of these model, up-to-date houses and furnish with them a printed bill of lumber needed, amount of hardware, number and size of sash, etc., and special building instructions, so that you will have no trouble in construction.

Price Complete, either plan, \$1.00

Blue Print Plan only, 50c postpaid.

The above prices only cover cost; we ask no profit.

ROUTLEDGE POULTRY HOUSE

A modern Poultry or Laying house embodying all the latest improved ideas in the construction so as to keep the fowls **healthy** and **free from colds, roup, etc.**, by proper ventilation without drafts.

Our aim has been to save labor in the building of the house and to make it easy to keep clean and free from vermin, as well as a labor saver in the daily care of the birds.

The nests, dropping boards, roosts, etc., are well and correctly placed. The birds have the use of the **full floor space**. Has open front, yet no rain nor wind can touch the birds or the floor.

The standard size of this house is 20x40 feet and will accommodate up to 400 hens very nicely. You can follow the same construction and make it smaller if you wish.

The birds are kept inside entirely. No outside runs are necessary. This makes it ideal for any place or location in the city or country.

PARROTS

We handle more young parrots than all other Northwestern dealers combined. The young parrots arrive during July and August, but we aim to have stock on hand at all times. Price of trained talkers on request. We offer hand raised, not the wild, trapped, unmanageable birds.

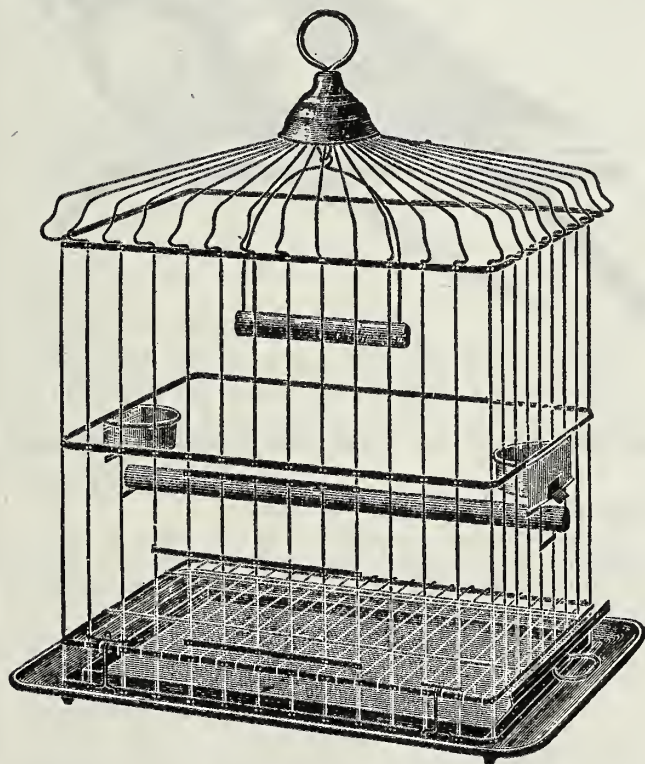
PANAMA PARROT.—The most popular parrot with our trade. Of quite large size, gentle disposition, easily taught and become great favorites. Deep green plumage. They often show a yellow spot on the back of the head. Young, 6 to 8 months old, each \$25.00 and \$30.00; extra select, \$35.00; Old Parrots, Trained Talkers, \$50.00 and up.

B B OR DWARF PARROTS.—These cute little parrots make great pets. They are active, bright and wideawake. They are not much on the talk, but can be trained. Their dark green plumage is always smooth and pretty. Their gentle disposition and winning ways make them great favorites. Each, \$7.50 and \$10.00.

CUBAN PARROT.—Medium size, green plumage, red tips on wings, light face, gentle, fine pets, good talkers. Note below.

MEXICAN RED-HEADED PARROTS.—Medium size, trim and active, make fair talkers, gentle. Green plumage, bright red on head, blue in wing and tail.

NOTE.—Cubans and Mexican Parrots are cheaper in price than Panamas but not as good talkers. They were not to be had last year, but may be obtainable this coming fall. Write for prices.



Moulding Base Nos. 101 to 103

FANCY SQUARE CAGES

Made of extra heavy tinned wire, zinc base, strong self-locking feed cups. They also have a slide cleaning pan on the bottom and wire grating to keep bird from getting down on the dirt.

No.	Size	Height	Price
115	16 $\frac{3}{8}$ x11 $\frac{1}{2}$ in.	23 in.	\$11.90
120	17 $\frac{1}{2}$ x14 in.	25 in.	14.50

PARROT FOODS.—You must remember that your parrot does not get all the foods nature intended it should have, therefore give "Polly" a treat by feeding our Health Food, Parrot Biscuits, Etc. See page 151.



Panama Parrot

For
BIRD
BOOKS
See page 153

Parrot Cages

These are extra strong, large and roomy, well finished and of the latest and best designs of Parrot Cages on the market. Our Special Cage Catalog will show larger cuts of the three styles, extra cups, etc.

MOULDING BASE SQUARE CAGES

Made of extra heavy tinned wire, new style moulding base, with removable cleaning drawer, and also has wire grating to keep bird from getting down on dirt. Tinned iron, self-locking feed cups. (See cut.)

No.	Size	Height	Price
101	15 $\frac{1}{8}$ x14 in.	27 in.	\$14.75
102	17 $\frac{3}{8}$ x15 $\frac{1}{8}$ in.	28 in.	16.95
103	21 $\frac{1}{4}$ x17 $\frac{1}{2}$ in.	31 in.	22.45

ROUND PARROT CAGES

These are very popular on account of the low prices. Our advice is to get the largest cage you can afford, as it gives "Polly" more room for exercise and less danger of spoiling the tail feathers. Heavy tinned wire, strong and well made; zinc bases, self-locking feed cups.

No.	Diameter	Height	Price
No. 50	13 in.	19 $\frac{3}{4}$ in.	\$ 5.65
No. 55	14 in.	21 in.	6.75
No. 60	15 $\frac{1}{2}$ in.	23 in.	8.85
No. 65	17 $\frac{1}{2}$ in.	28 in.	12.30

PARROT STANDS

After your parrot has become tame and well trained, a parrot stand is very desirable. It gives more freedom and the bird greatly enjoys it, and can keep his plumage in much better condition. Keep Polly chained when you leave.

No. 1.—Finished in black enamel. Complete with feed cups, tray and chain. Good heavy base, so it will not tip over. Tray adjustable to any height. Price \$16.40. Stand Covers, \$11.25.

SONG AND CAGE BIRDS

We are the largest importers and dealers in Birds and Gold Fish in the Northwest. This department of our business has grown rapidly and we have incorporated the Routledge Bird, Pet and Animal Company and opened an East Side Branch under this name at East Oregon and Union Avenue, and we now carry large and complete stocks of cages, supplies and foods and all birds in their season.

We Guarantee Our Singers and Will Exchange if Not Satisfactory

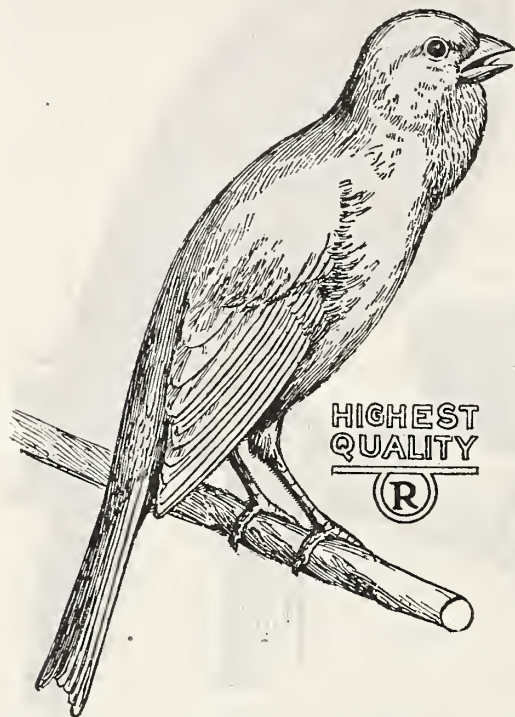
Imported and American Canaries

Their cheery song is like sunshine to the soul; their bright plumage, active ways and cheerful dispositions make them great favorites. For your convenience we have inclosed with glass "Bird Parlors" on our first floor. You are welcome any time. Come in and see our birds and hear them sing.

ST. ANDREASBERG. World-renowned and the sweetest singers on earth. These birds have been given a musical training; their song is sweet and soft with many rare and pleasing notes, thrills, rolls, etc. Imported, Singers, \$10.00 to \$15.00; American raised, Males, \$5.00 to \$7.50; Females, \$2.50.

HARTZ MOUNTAIN ROLLERS. Beautiful and incessant singers, always bright, active and cheerful. Some singers in this class are almost equal to the above, especially where they have had special training. Imported, Males, \$5.00; Selected Singers, \$7.50; Females, \$1.50.

HARTZ MOUNTAIN SINGERS. The well-known and popular American-bred canary. Males, \$5.00; Females, \$1.00; Selected Females, \$1.50; Young Males, August and September only, not yet in song (no exchange), \$3.50 each.



OTHER CAGE BIRDS

We do not always have all the following birds on hand, but can get them quickly on orders. For further information, write.

AUSTRALIAN SHELL PAROQUETS.—Often called Lovebirds, look like a miniature parrot, a little larger than a canary; plumage green, very intelligent and beautiful. Each, \$5.00; pair, \$10.00.

FINCHES.—Strawberry, black headed Nun, Society, European gold, all \$5.00 pair; chestnut, Tricolor-Nun, Diamond, \$8.00 pair; Zebra, musk and black throat, \$10.00 pair; Gould Finches, \$15.00 pair.



Shell Paroquets—Lovebirds

JAVA RICE BIRDS, pure white, \$5.00 each.

JAPANESE ROBBINS, Each \$5.00; pr. \$8.50.

===== We please others and we can please you. Let us try =====

Winlock, Wash., Feb. 7, 1921.
Routledge Seed & Floral Co.

Gentlemen: I received my bird Saturday in good condition. Am well pleased with it. It is a beautiful bird and I think a fine singer.

Yours truly,

MRS. ALICE F. CONNELLY.

Marshfield, Ore., June 16, 1921.
Routledge Seed & Floral Co.

Gentlemen: I wish to advise you that I received the canary bird in good condition, and am very well pleased with him. He sings beautifully, and is also very pretty to look at.

Thanking you, I am,

Very truly yours,

MRS. B. F. LIESCH.

Burley, Idaho, Feb. 1, 1921.
Routledge Seed & Floral Co.

Gentlemen: The birds and cage which you shipped me arrived Sunday, and were in splendid condition, and I am tickled to death with everything.

Thanking you for your kind attention and courtesy in this matter, I remain,

Very truly yours,

PEARL HESS.

Pocatello, Idaho.

Routledge Seed & Floral Co.

Sirs: Canaries arrived O. K. and I desire to thank you for the prompt, efficient manner in which you fill all orders that I send to your house, as it is a great help to me to do business with a firm of this kind.

Yours very truly,

MRS. CARRIE CLIFTON.

Klickitat, Wash., Feb. 18, 1921.
Routledge Seed & Floral Co.

Dear Sirs: The song bird we got at your store at Xmas time is doing fine. He sings so sweet. Every one who sees him and hears him sing says he certainly is a nice bird and we think so too.

Sincerely,

MRS. WM. LORENGEL.

Washougal, Wash., May 16, 1921.
Routledge Seed & Floral Co.

Dear Sirs: Just a word of appreciation regarding your birds. I purchased a Hartz Mountain female from you in April. I now have four fine birds and she is an excellent mother. I shall certainly recommend your company in the future.

MRS. G. M. BOYD.

LIVING PRESENTS.—Did you ever stop and consider what a desirable Christmas, birthday or wedding present a beautiful CANARY makes? They are so different, interesting and desirable, SO CHEERFUL AND LOVEABLE, long after other things are forgotten.

Routledge H. Q.—"Highest Quality"—Bird Foods

We are making a specialty of Bird Foods and Remedies and carry in stock the largest and only complete line in the Northwest. Our rapidly increasing trade shows that the public appreciates the opportunity to get H. Q. "HIGHEST QUALITY" foods and remedies of "MERIT" for their pets. Read about the new East Side Store of the ROUTLEDGE BIRD, PET AND ANIMAL COMPANY. See page 4.

Routledge H. Q. Roller Bird Seed

Our own special mixture for American, Hartz Mountain and St. Andreasberg Canaries; especially prepared for the singers. Contains no hemp, but the correct proportions of highest quality re-cleaned Canary, Sweet Rape, small Golden Millet and a few other seeds to give health and "pep" to the singers.

It is no wonder that thousands of canaries die annually from the effects of common Bird Seeds put up by grocery and drug companies. It is generally old, musty or dusty, inferior seeds, and not correctly mixed.

Try a package of our H. Q. and note the difference and also the saving, even though it is a little higher in price.

"H. Q." sold only in sealed 1-lb. cartons (see illustration of our 1-lb. carton). Take no other.

Price, large full pound carton, with small envelope of Bird Sand and piece of cuttlebone, 30c lb.

Add postage if wanted by mail.

H. Q. HEMP SEED.—Hemp is the large, round, dark-grey seeds found in all cheap mixtures. It is very heating and fattening and should be fed sparingly and not to singers at all. (10 lbs. \$1.25.) Price 20c lb.

H. Q. CANARY.—There is a big difference in the stock and quality of canary. Buy our re-cleaned Sicily seed. Quantity price on request. Lb. 20c; 10 lbs. at 15c

H. Q. MILLET.—Small golden soft shell, fresh and re-cleaned. Lb. 20c; 10 lbs. at 15c

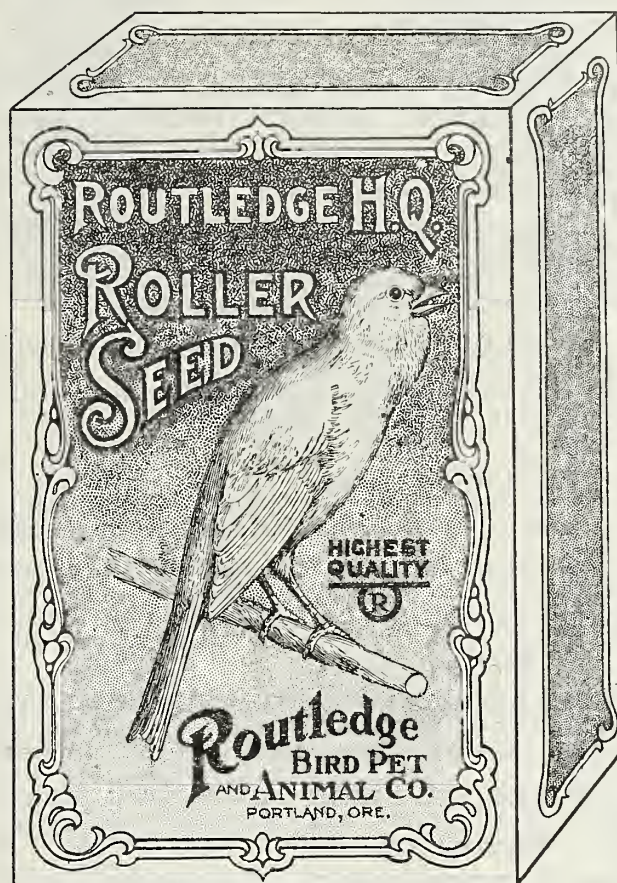
H. Q. SWEET BIRD RAPE.—Easily detected by the sweet taste. Beware of cheap rape. Lb. 25c; 10 lbs. at 18c

MAW.—(Poppy.) Bird tonic. 50c lb.

LETTUCE SEED.—For birds. 35c lb.

H. Q. SILVER BIRD SAND.—White and clean; put up in 2-lb. cartons, 15c; in bulk 5 lbs., 30c; 10 lbs. 50c.

NOTE.—Add postage to all foods above when ordering by mail



This illustrates our new H. Q. Bird Seed Carton—Highest quality seed obtainable. (Green, yellow and red box, yellow bird.) Take no other. Tell your dealer to stock it and send us his name. We'll write.

"H. Q." BIRD GRAVEL.—A new and ideal product, becoming very popular with bird fanciers. 2-lb. can 20c

RED BIRD GRAVEL.—Preferred by some of our customers. 2-lb. box 20c

CUTTLE BONE.—High grade, large size. Each 10c, or 2 for 15c, postpaid; with patent fasteners or holders, 10c and 15c, postpaid.

Parrot Foods, Tonic, Etc.

H. Q. Mixed Parrot Seeds.—This is our own mixture of clean, well cured sunflower, hemp, pumpkin and corn, properly mixed. Your "Polly" will like this. 25c lb.; 5 lbs. for \$1.00; postage extra.

H. Q. Sunflower.—We offer only large, plump, full-meated seed properly cured and of the right age for health. Far superior to the average stock sold. 20c lb.; 5 lbs. for 90c; postage extra.

Parrot Corn.—Best quality for parrots. 15c lb.; 4 lbs for 60c; postage extra.

M. G. Parrot Spray.—Will cure Parrots of the habit of biting off their feathers. Per bottle 50c; postpaid 65c.

M. G. Mixed Parrot Seed.—Properly mixed for good health and plumage. Full and valuable directions on the care of Parrots on each box. Per carton 30c; postpaid 35c.

M. G. Prepared Corn, for Parrots.—To be given in addition to the seed. Per carton 20c; postpaid 25c.

NOTE.—Add postage to all prices not marked Prepaid if wanted by mail.

Routledge General Parrot Tonic.—Prepared by us expressly for parrots afflicted with indigestion, diarrhoea, catarrh and being off feed. Postpaid 30c.

M. G. Parrot Biscuit, for old and young, to keep them in good health and plumage. Per carton 30c; postpaid 35c.

Parrot Tonic.—Unexcelled for young Parrots, cures catarrh, bowel trouble, etc. (M. G.) Per bottle 35c; postpaid 40c.

M. G. "Health Food for Parrots, for health and fine feathers. Per carton 30c; postpaid 35c.

Parrot Diarrhoea Cure (K.)—A cure for diarrhoea or bloody flux. 40c; postpaid 45c.

Reliable Parrot Remedy (K.)—For colds, moulting and diarrhoea, etc. 50c; postpaid 60c.

Parrot Tablets. — Conditioner, prevents feather picking. 30c; postpaid 40c.

Plumage Restorer (K.)—For Parrots, Paroquets and birds that pick and bite their feathers. 30c; postpaid 35c.

Routledge H. Q. Bird Remedies

We have for several years used successfully in our own Pet Stock department the following remedies. These H. Q. remedies are our own preparations and fully guaranteed. Our own experts and our veterinarian know pet stock, their ailments and best cures. Consultation free. Complete instruction in each carton.

NOTE.—Following prices are postpaid. 5c less per package if called for. Complete Directions in each package.

ROUTLEDGE HEALTH FOOD.—A special food carefully compounded to combat intestinal ailments of birds, a trouble that is the cause of many birds dying yearly. Not generally understood. Postpaid 30c.

ROUTLEDGE GENERAL TONIC.—Made to meet a demand for helping birds in a rundown condition where there is no definite ailment existing, but still there is need for a tonic. Gives quick results. Postpaid 30c.

ROUTLEDGE MOULTING FOOD.—Supplies the necessary elements of food value required by a bird at the beginning and during moulting time. The bird will repay you many times over with its sweet song for your thoughtfulness in supplying it with this food. Postpaid 30c.

ROUTLEDGE SONG TONIC.—For loss of voice and diseases of the respiratory organs. Stimulates peristaltic action and organs of the circulation. Postpaid 30c.

ROUTLEDGE COLD REMEDY.—Birds suffering from colds, asthma and kindred troubles must have immediate attention or they are very apt to be lost; at least the song will be destroyed greatly if not entirely. Keep this remedy on hand. Postpaid 30c.

ROUTLEDGE DIARRHOEA REMEDY.—The best that money and skill can produce, without a peer for quick and healthful results. Use our Bird Laxative first. Postpaid 30c.

ROUTLEDGE BIRD LAXATIVE.—Composed of vegetable oils, effective but harmless. Postpaid 30c.

ROUTLEDGE BIRD OINTMENT.—This preparation is emollient and stimulates the natural healing processes and keeps down the unnatural dryness of the epidermis. Don't neglect the bird's feet and legs. Use this ointment for scales, roughness and leg mites. Postpaid 30c.

ROUTLEDGE BIRD LINIMENT.—One of the greatest remedies for diseases of the feet and legs of birds, also for skin troubles. Postpaid 30c.

ROUTLEDGE DEPLUMING MITE LIQUID.—For destroying the depilating mite which causes the feathers to come out around the neck and on the back of the head. Postpaid 30c.



Look for this style carton. Three colors—green, yellow and red.

ROUTLEDGE DISINFECTANT CAGE WASH.—There is a great demand for a disinfectant to use when washing cages that will destroy all disease germs, lice and mites. Will not harm the finest cage, either brass or wicker. Use a tablespoonful to a quart of water. Use Routledge Bird Soap to make a lather and clean the cage at the same time. Rub the cage dry with a soft, dry cloth, and it will shine like a new cage. Postpaid 30c.

ROUTLEDGE SPECIAL BIRD SOAP.—Prepared especially for washing bird's legs and feet, feathers, also if bird doesn't bathe, and cages, cups and perches. Unsurpassed for human use and can be used on the most delicate skin. Postpaid 30c.

Canary Bird Specials—Very Popular—O. K.

These Five Articles Have Merit; We Sell Gross After Gross

Trial Order—1 each, 5 kinds, only 85c, postpaid



Read our book, "Care, Feeding and Breeding of Canaries"; worth a dollar; price 30c, postpaid. See next page.

BIRD MANNA.—A combination of seeds, herbs and roots that nature intended birds should have. Food and medicine combined. A tonic and conditioner. Comes in half-round cakes, made to fasten on the cage wires. Per cake, 15c; postpaid 20c; 2 for 35c.

ROBINSON'S BIRD PASTE.—Feed it same as Manna, which it resembles very much. Per tin 15c; postpaid 20c.

BIRD - O - LINE.—A preparation very similar to "Manna," except that it is granulated and dry and is fed in the seed or "tonic cups," a little at a time, as per directions. Per box, 25c; postpaid 30c; 2 for 55c.

CANARY HIGH BALLS.—Another article of "Manna" merits. Highly praised. Comes in ball form and hangs in the cage. "Mr. Bird" eats it as he needs it. Each 15c; postpaid 20c; 2 for 35c.

SPRATT'S COD LIVER OIL NESTLING FOOD.—A food for young birds. A substitute for boiled eggs. An excellent food for old birds in the moulting season. Per pkg. 25c; postpaid 30c; 2 for 55c.

MITE AND LICE POWDERS

Watch out for lice on the birds and the little red mites that hide in the crevices of the cage or walk during the day and live on the birds at night. Your bird cannot be contented and happy with these pests.

Bird Lice Destroyer (H. Q.)—Put up in powder guns ready to shoot. 35c; postpaid 40c.

H. Q. Mite Powder.—Pkg. 15c, postpaid.

Bird Mite Powder (P).—Large box, 40c.

H. Q. Bird Lice Powder.—Very effective, if dusted on the bird. Pkt. 15c postpaid.

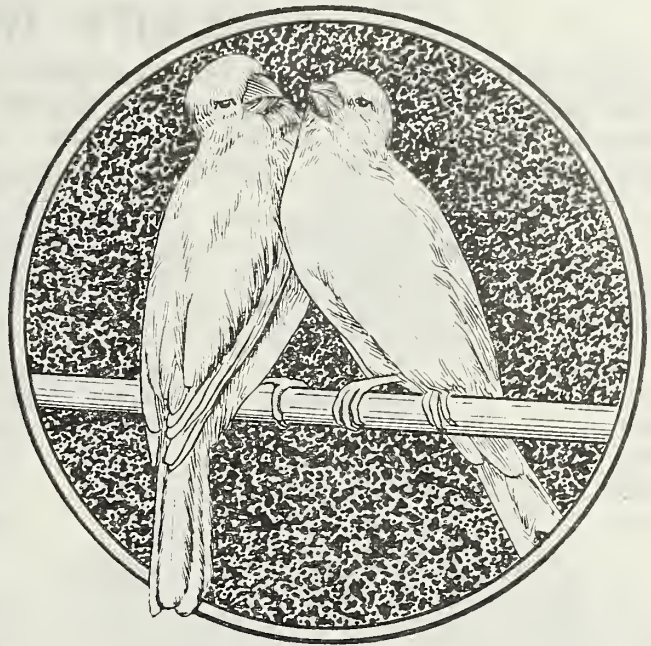
H. Q. Mite Liquid.—See page 152.

Note.—Insect powder blowers at 25c each postpaid. You need one to apply powder effectively.

Canary Leg Bands, doz. 50c

Bird Cages and Extras

We believe we carry in stock the largest assortment of Fancy and Plain Bird Cages in the Northwest. Our prices are right. Bird Cage Catalog on request.



Two is Company, Three is a Crowd

Max Geisler—Kaempfers—Philadelphia Bird Remedies

In addition to our own H. Q. preparations we also sell other leading Bird Food companies' Feeds and Remedies.

To conserve space, we will designate the different stocks as follows: (G) for Max Geisler, (K) for Kaempfers, (P) for Philadelphia Bird Co.'s, (S) for Spratt's.

NOTE.—The following prices are all postpaid, 5c less per package if called for. Prices subject to market changes.

Bird Seed—Mixed

Geisler's Roller, 12-oz. pkg. 45c

Philadelphia B. F. Co.'s, 14-oz. pkg. 45c

Routledge H. Q., see page 151.

Bird Soaps—See page 152.

Song Restorer (Kaempfer's), large size 55c

Song Restorer (Excelsior) 30c

Song Restorer, Drahota (P) 30c

Song Restorer (S) 30c

Song and Moulting Foods (G) 30c

Treatment A.—(Song Restorer) (G) 35c

Treatment B.—(Digestive Trouble) (G) 35c

Treatment C.—(Cold Cure) (G) 35c

Treatment D.—(General Tonic) (G) 35c

	Price, Postpaid
Bird Biscuit (G) Plain	25c; Medicated 30c
Vegetable Extract (G) general tonic	40c
Moulting Pepper (P), moulting season	40c
Asthma Tablets (K)	30c
Canaradyne (S), for asthma	30c
Diarrhoea Tablets (K)	30c
Constipation Tablets (K)	30c
Bird Bitters (P), general tonic	40c
Nestling Food (P), for young birds	30c
Plumage Restorer (K), a spray	30c
Food Ointment (K), for sore feet	30c
Bird Liniment (K), for scaly legs	30c
Color Food, Red or Orange, gives feathers better color. Fine for young birds or after moulting. (S) 30c; (P)	40c
Nesting Hair (P), for nests	15c
MOCKING BIRD FOODS.—For Mocking Birds, Robins, Thrushes and all soft-billed birds.	
Spratt's Defiance, large cans	75c
Ruhe's, 1-lb. cans	70c
Geisler's, ¾-lb.	50c

Up-to-Date Pet Stock Books**BIRDS**

ROUTLEDGE BIRD BOOK—OUR NEW BOOK.—"Care, Feeding and Breeding of Canaries," gives a volume of real information regarding Canaries. Also informs you how and what to use to overcome disease and trouble. It is based on many years of experience and study. Price 25c, postpaid 30c.

American Bird Fancier.—New Breeding and care of song and domestic birds; 120 pages 75c

Feathered Pets.—140 pages on breeding, care and food for Canaries, Finches, Parrots and all cage birds. Postpaid. 40c

Canary Breeding and Training (Page).... 40c

British Bird Culture, (Spratt's)..... 15c

Canary Birds.—A complete guide for their breeding, rearing and treatment; 100 pages. Postpaid 75c

Parrots and Talking Birds..... 50c

BOOKS ON DOGS

Amateur Dog Book .—(Brutette)—Training, care and treatment, 150 pages....	\$.60
Amateur Trainer .—(Haberbein)	1.25
Airedale Terrier Standard .....	.60
Airedale Terrier .—(Buckley)	2.20
Boston Terrier—All About It —(Axtell) ..	2.60
Common Sense Dog Doctor .—Spratt's...	.60
Dogs of All Nations .—130 pages; fully illustrated (Mason) .....	.75
Fox Terrier, The Perfect .....	.85
Practical Dog Breeding —(Haynes)	1.75
Bird Dogs, The Training —(Whitford)...	1.60
The Collie —(Dalziel)	1.00

CAT BOOKS

Cat Culture, Spratt's, 15c: Domestic and Fancy Cats, by Jennings, covers all subjects, 85c, postpaid.

REMEMBER—The life and song of every bird depends on the quality of seed it gets. Routledge H. Q. Roller Seed is the best that is possible to buy. Use it a ways. See page 151.

CANARY BIRD CAGES

We believe we carry the most complete line of plain and fancy cages on this Coast. Limited space in this catalog will not permit us to illustrate all, but if further interested send for our **SPECIAL CAGE CATALOG**. We offer herewith three of our most popular and best sellers. Prices subject to change in metals.

LA FAVORITE BRASS CAGES

This is one of the new, late models; very popular and one of our best sellers. The full, graceful design at the top adds greatly to its general appearance. Handsome, bright finish, extra well made. (Wgt. boxed, 10 to 14 lbs.) See illustration.

No.	Size, Inches	With Guard	Without Guard
7004	9 1/8 x 6 1/2 x 12 3/4	\$6.40	\$3.95
7006	10 1/8 x 7 1/8 x 13 1/4	7.45	4.85
7008	10 3/4 x 7 3/4 x 13 1/2	8.70	5.85
7010	13 x 8 1/2 x 14 3/4	9.70	6.95

NIAGARA BRIGHT STEEL CAGES

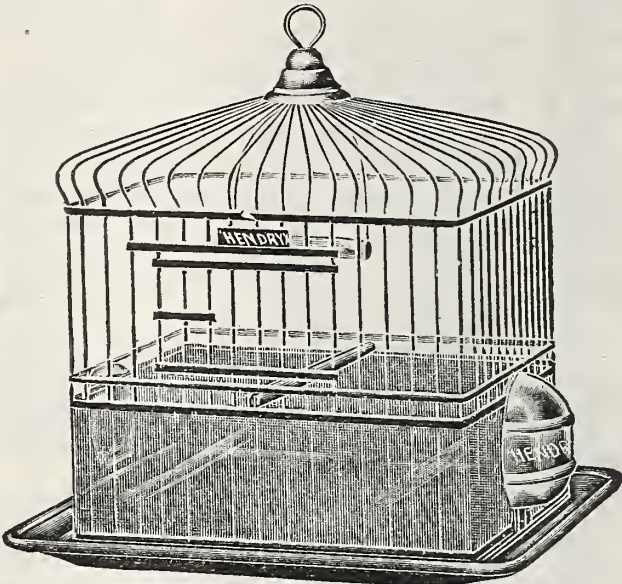
These new metal cages are finished in bright steel and look real nice. Non-corrosive, neat, bright, well made cages, same style as La Favorite. See illustrations. Mighty good value for the price. (Weight boxed, 10 to 14 lbs.)

No.	Size, Inches	With Guard	Without Guard
7104	9 1/8 x 6 1/2 x 12 3/4	\$3.90	\$3.15
7106	10 1/8 x 7 1/8 x 13 1/4	4.15	3.25
7108	10 3/4 x 7 3/4 x 13 1/2	4.40	3.45
7110	13 x 8 1/2 x 14 3/4	4.95	3.80

ECONOMY ENAMELED CAGES

These cages are extra good value for the price. Well made and properly finished so that the enamel will not chip off. Color, pure white. For a low-priced cage, it would be impossible to find better value anywhere. A person often has use for a second cage for young birds or perhaps an extra one, and these are just the thing. See illustration. (Weight boxed, 10 to 12 lbs.)

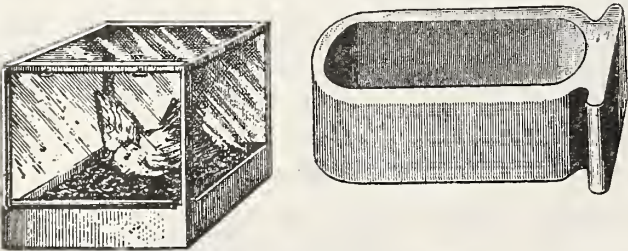
No. and Price	Size	No. and Price
With Guard	Inches	Without Guard
265.....\$4.00	9 3/4 x 6 3/4 x 15 1/2	165.....\$2.35
266..... 4.90	10 1/2 x 7 x 16	166..... 3.15
267..... 5.40	11 1/2 x 7 1/2 x 16 3/4	167..... 3.45
268..... 6.15	12 1/4 x 8 1/4 x 17 1/2	168..... 3.80
269..... 6.75	13 x 8 3/4 x 18	169..... 4.25



La Favorite, with Seed Guards



Economy Enamel, without Guard



Bird Bath House Tonic Cup

Extra Cage Supplies

Canary Bath House.—Enameled frame, removable glass lights, size about 4x5 inches. Open the cage door and hook on. "His majesty" steps in when he is ready. Price \$1.25; postpaid \$1.40.

Tonic or Medicine Cup.—Slips in between the wires. Ideal for feeding "extras." 15c; postpaid 20c.

Cage Cups.—For water or feed. Open or closed; half egg-shape, in plain glass or opal. Each 20c; postpaid 25c. **Breeding Cage Cups,** 20c each; 25c postpaid.

Bathing Dishes.—Opal or plain glass, 25c; postpaid 30c.

Breeding Cages

All metal, enameled white, all complete.		
No. 4	Single, for 1 pair	17x 9x14 in...\$ 5.95
No. 1	Double, for 2 pairs	25x12x16 in... 10.00
No. 2	Double,	22x11x15 in... 9.00
No. 3	Double,	19x10x14 in... 8.00
No. 113	Double,	27x10x15 in... 9.45

Wall Brackets

Swinging Arm, heavy nickle-plated wire. 8 in., 30c; 10 in., 40c; 12 in., 60c. Brass, 8 in., 40c; 10 in., 45c; 12 in., 65c.

Screw Wall Bracket.—Cast iron, fancy design, brass plated; 12 in., \$1.50.

Bird Nests.—Wire 20c; willow 25c.

Nesting Hair.—15c pkg.; 2 for 25c, postpaid.

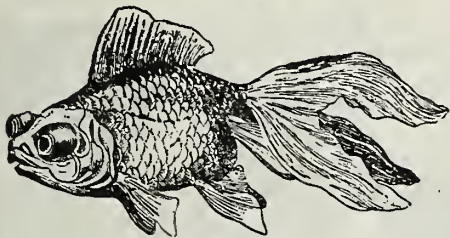
Cage Suspension Springs.—Single, light, 25c; heavy, 35c; Double, 50c; Single with adjustable chain, 50c.

OUR CATALOG of Cages and Supplies illustrates these supplies.

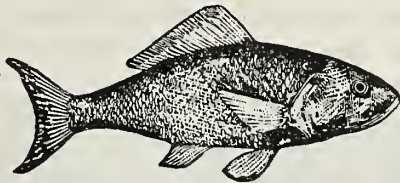
Note.—Bird cages can be sent by parcel post, if necessary, providing you add postage at weights given. However, we advise express, as it is a much safer way.

GOLDFISH, GLOBES, FOOD, ETC.

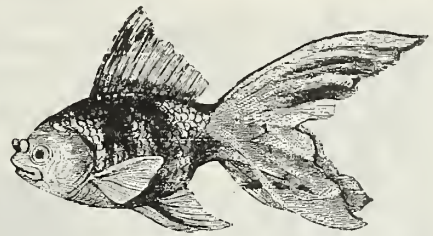
We are the largest retail and wholesale dealers in Fancy Gold Fish in the Northwest, often having a thousand or more on display in our large aquarium at our store.



Chinese Telescope



American Gold Fish



Japanese Fan-Tail

An aquarium is a beautiful ornament. It suits everywhere—parlor, library, dining and sitting-room, and may indeed be introduced in apartments of the sick. The bright, active Gold Fish are very interesting, a perpetual source of amusement for both old and young folks. Children are always delighted with them.

CARE OF GOLD FISH.—Very simple and little trouble. The water in the aquaria must be changed from one to six times a week, depending on the size of the globe, number of fish and the temperature of the room. When fish come to surface and gasp for air, they should be given fresh water. Keep the aquariums out of hot sunlight and in a cool place.

Price List of Fish

AMERICAN GOLD FISH.—Very hardy and lively. Each, very small, 25c; small, 35c; medium, 50c; medium large, 60c; large, 3 to 4 inches, 75c; extra large, \$1.00; extra large breeders, \$2.00 to \$3.00; fancy tri-colored, 50c to \$1.50 and up.

COMMON SILVER FISH.—Same as above, except they are silvery white. Each, medium, 25c; large, 50c to 75c and up to \$1.50.

JAPANESE GOLD FISH—FAN-TAILS.—These have spreading tails of a delicate lace-like appearance, very showy and attractive. Price, small, 35c; medium, 50c; large, 75c to \$1.00 and up to \$3.00. Tri-colored, golden-red, pearly-white and black, showing two or all three colors, 75c to \$1.50 each.

COMET.—Similar to the American, but the tail is very long, graceful and delicate. Price each, 50c, 60c, 75c, \$1.00 and \$1.50.

CHINESE TELESCOPE.—Color black, curious and attractive on account of the large, elongated eyes, having the appearance of a telescope. Flowing double tails. Very rare. Price each, 75c to \$1.00.

TADPOLES.—Desirable as scavengers for the aquaria. They consume the decaying matter and help keep the water pure. Price each, 15c.

Gold Fish Food

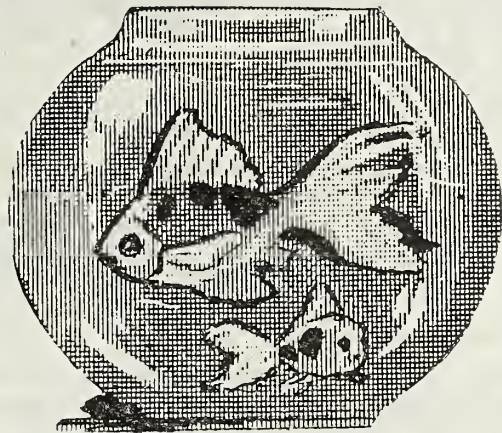
FEEDING.—The only safe diet is our prepared Fish Foods, fed daily and only what they will eat up quickly. More fish die from over-feeding than from any other cause.

RICE WAFER OR FLAKE.—Best and most popular; large box, enough food for four fish for six months, 25c, postpaid. Directions for feeding and care on each box.

SPRATT'S.—Baked and reground to pin-head size. Per can, 15c; postpaid 20c.

DRIED ORIENTAL FLIES.—For a change. Pkt., 25c.

WHEN? We have the largest supply of Gold Fish on hand during the FALL, WINTER and EARLY SPRING. It is not safe to ship fish during the hot summer months.



Fish Globes

Cannot be mailed

This style can be set on the table or side-board, or suspended by brass chains; the most popular and best seller. Note.—Packing charge 25c per gal. extra.

BLOWN GLOBES.—These are the highest quality of glass blown—smooth and perfect. Each, ½ gal., \$1.40; 1 gal., \$2.00; 1½ gal., \$2.60; 2 gal., \$3.25; 2½ gal., \$3.80; 3 gal., \$4.40.

MOLDED GLOBES.—Clear white, heavy glass, popular sellers. Each, 1 pint, 25c; 1 qt., 35c; ½ gal., 60c; 1 gal., \$1.40.

SQUAT AQUARIUMS.—Latest style, wider and flatter than above; not so easy to tip over. Each, 1 qt., 65c; ½ gal., 85c; 1 gal., \$2.00; 2 gal., \$4.25; 3 gal., \$6.25.

STANDARD OR FOOTED GLOBES.—Write for prices. We are out of most sizes. Not popular.

SQUARE AQUARIUMS.—Prices on request.

Aquaria Castles

As ornaments to set in the globes. Prices range from 50c and up to \$2.00 each. In ordering state size of globe.

Aquaria Plant or Fish Moss

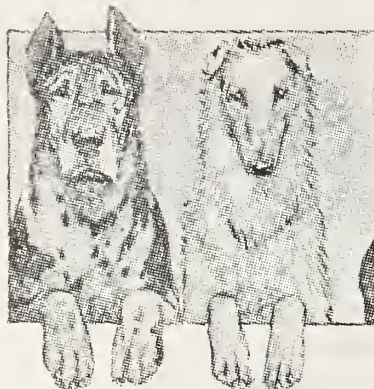
This water plant improves the appearance of the aquaria or globe and helps purify the water, also keeps the water fresh longer. Price per bunch, 25c, postpaid. Cannot supply in July or August.

BOOK.—"The Aquaria and Care of Fish"; paper cover, 35c, postpaid.

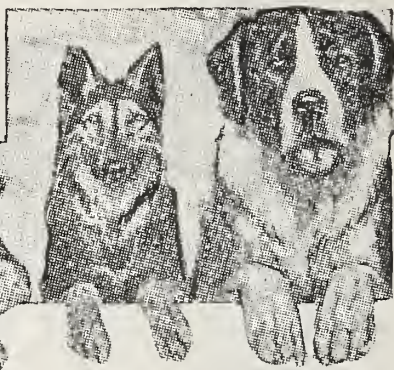
NOTE.—ALL SHIPMENTS (outside of the city) must go by express. A charge of 40c is made to cover cost of Shipping Bucket, holding from two to eight fish. Gold Fish can be shipped safely overland hundreds of miles. They cannot be sent by mail.

PUPPIES AND DOGS

Buy your child a puppy and let them grow up together. Aside from the protection and companionship, educational experts advise that all children are better by having pets.



Our Pet Stock, Hutches and Kennels are inspected regularly by Dr. M. Howes, veterinarian, and member of the Oregon Humane Society.



Bring the kiddies to see the puppies in our window (West Side store), and visit our kennels at our Pet Stock Store on the East Side. See page 4.

Most buyers prefer a pup so it can be raised and trained to suit, but often someone wants a full-grown dog; we sell both. Our largest demand is for Fox or Irish Terriers, Toy, Boston and English Bulls, Airedales, Spitz, Cocker Spaniels and Scotch Collies, but we can also supply Setters, Pointers and most other breeds.

Prices.—If out-of-town customers will write and tell us what they want—breed, color and sex and what stock, fancy, pedigreed or just good, fairly pure strain, we are sure we can please you and give you extra good value. Prices on the different breeds and stock range from as low as \$7.50 to \$15.00 and up to \$50.00 to \$75.00.

BOOKS ON DOGS

Up-to-date list of Dog, Cat and Bird books on page 153.

ROUTLEDGE SPECIAL DOG SOAP

Made to meet a demand for all kinds of animals or fowls, cats, dogs, chickens, etc. It has the proper ingredients to get results in all general conditions, still be harmless to the animal which it is used on. It is non-poisonous and non-irritating to animals or humans.

Price per cake, 25c; postpaid 30c.

ROUTLEDGE MEDICATED DOG SOAP

This soap is prepared from the formula of a celebrated physician and combines all healing and purifying ingredients possible in a soap. Its power to fortify and protect the user or animal from contagion is truly wonderful.

This soap will remove dandruff, stimulate hair growth, prevent most skin eruptions, and destroys most germ diseases communicated by contact. One washing generally kills all the fleas on an animal, leaving the skin and fur in the best of condition. We advise its use freely on either man or beast. It is especially fine to use on animals before and after shows to prevent disease, fleas, mange, etc., from getting a start.

Price per cake, 50c; postpaid 55c.

Pedigree Blanks

For Dogs, Cats and Rabbits. Right size and style, superb stock. Prices: State kind wanted, 10c each; 6 for 50c; 12 for 85c.

Free Veterinary Consultation

If you have use for a veterinarian, consult our Dr. M. Howes by phone or letter. Consultation free. Services reasonable. He is a graduate of Cornell University, loves animals and absolutely knows his profession. Treats Pet Stock of all kinds, as well as Horses, Cows and Livestock. Address in care of us, or phone Tabor 6566, where he maintains his city hospital.

For sickness or surgical work of animals of any kind, consult or call Dr. M. Howes, veterinarian.

DOG COLLARS, CHAINS, ETC.

DOG SUPPLIES.—Limited catalog space will not permit us to illustrate and describe our stock of Dog Collars, each 50c to \$4.00; Harness, \$1.00 to \$5.00; Chains and Leads, 40c to \$1.50; Muzzles, 60c to \$1.00; Sweaters, \$3.50 to \$5.00; Brushes, \$1.50 up; Combs, \$1.00 up. Call or write for large Pet Stock Catalog. Dog Foods on pages 157-160.

ROUTLEDGE DOG WASH

A disinfectant and germ destroyer. This is especially prepared to meet a demand for a real germ destroyer and disinfectant. It kills fleas by contact, relieves irritation and itching skin and if used regularly as a wash and spray will prevent most contagious germ diseases. Use 1 tablespoonful to a gallon of water. Prices: 3-oz. bottle 25c, postpaid 35c; pint 75c; quart \$1.25.

ROUTLEDGE PUPPY WASH

For Toy Dogs and Puppies. An excellent disinfectant and a germ destroyer. Kills all dog odor and fleas, improves the skin and coat. Use in bath water with H. Q. Dog Soap. 1 tablespoonful to a gallon of water. Price: 3-oz. bottle 25c, postpaid 35c.

FEROND'S MILNSHAW MANGE REMEDY

Gladstone, Oregon.

Routledge Seed & Floral Co.

Dear Sirs: The Ferond's Milnshaw Mange Cure bought of you cured a very bad case of mange when everything else had failed. Am very glad to recommend it.

Yours very truly,

MRS. W. W. LEETE.

Price: Small 75c; Large \$1.50; postage 10c extra.

NOTE.—We would be very glad to hear from any reliable breeders of Dogs, when they have stock to sell. Give us full information in the first letter, BREED, WHAT KIND OF STOCK, AGE, SEX and NET PRICE TO US.



Champion Dog and Puppy Biscuit

Right in line with Routledge H. Q. Foods. Good enough for human consumption.

Champion Biscuits are made in the most modern, sanitary, and best equipped plant of its kind in the world.

Only clean, sweet meats and choice cereals are used in the manufacture of these foods. The proportions are scientifically blended, so as to produce a thoroughly balanced ration—rich in protein—containing all the elements necessary to keep the dog in the best physical condition.

We recommend Champion Biscuits as we feel assured that they are the best obtainable. They are nourishing, complete; contain no waste products, and are wholesome and sanitary, appetizing and READILY EATEN.

Their exclusive use will assure proper nutrition, health, glossy coats, regular habits, and natural sleep.

No dog should EVER be fed sloppy kitchen scraps, candy or other sweets, potatoes, chicken bones, or greasy foods. Let the dog always have access to plenty of clean, cool, drinking water.

PRICES: Champion Dog Biscuits, 3 lbs. 50c; 6½ lbs. \$1.00; 25 lbs. \$3.50; 100 lbs. write. Puppy Biscuits, 3 lbs. 50c; 6 lbs. \$1.00; 25 lbs. \$3.75. Add postage if wanted by parcel post.

Bennett's "Milk-Bone" Dog and Puppy Biscuit

A FOOD THAT ALL DOGS AND PUPS LOVE. MADE BONE-SHAPED.

A clean, wholesome, scientific food that dogs and puppies take to instantly.

Maltoid Milk-Bone is made to meet the particular physical needs of dogs; it is made to suit the peculiar digestive organism of dogs. Maltoid Milk-Bone not only provides the necessary energy-producing material, but it also supplies the materials for tissue repair.

If you want a happy, bright-eyed dog, full of life and ginger—whose skin is always healthy and coat always glossy, a dog with bright, clear eyes, sweet breath and regular habits, feed Bennett's Maltoid Milk-Bone.



PRICES: Bennett's Milk-Bone Puppy or Dog Biscuit, sold in cartons only (P. P. wgt. 2½ lbs., net 2 lbs.), each 45c; doz. \$5.00. Add postage if wanted by mail.

Catnip Mice and Balls



Catnip Mice and Catnip Balls make cats playful, healthy and wide awake—they love the smell of catnip, crave it, and need a little occasionally to keep in good health.

CATNIP MICE

Made of cloth, same size, shape and color of a real mouse, and stuffed with dried catnip leaves. Kitty will play for hours with this mouse and then should be given a little dried catnip. Price, 15c; postpaid, 20c.

SPECIAL.—1 Catnip Ball, 1 Catnip Mouse and 1 pkg. Catnip, postpaid, for 50c.



CATNIP BALLS

These are hollow wooden 1½-inch red balls, filled with catnip. It's great sport for the cat. A wonderful toy for cats. Price, 15c; postpaid, 20c.

CATNIP LEAVES

Catnip leaves, properly cured and dried. Always keep a package on hand to treat Kitty with. Price, 15c; postpaid, 20c.

Persian Cats or Kittens

These long, fluffy, silky-haired pets are great favorites with the ladies, and with their bright intelligence, affectionate dispositions, cleanliness and beautiful appearance it is not to be wondered at. Most of the stock we offer is from pedigreed stock and eligible to registration.

PRICES—Young Kittens: Males, \$10 to \$20; Females, \$7.50 to \$15; Old, 6 months or over, prices on request.

ROUTLEDGE SPECIAL CAT SOAP.—We have prepared this especially for cats. It is high grade, non-irritating, delicately perfumed and will clean the skin and fur and eliminate cat odor, disease and vermin without injury to cat, if you follow directions on the carton. Price, 25c; postpaid 30c.

CAT COMBS.—\$1.75 to \$2.00 each. For Cat Food and Medicine, see page 160.

RABBITS — BELGIAN HARES

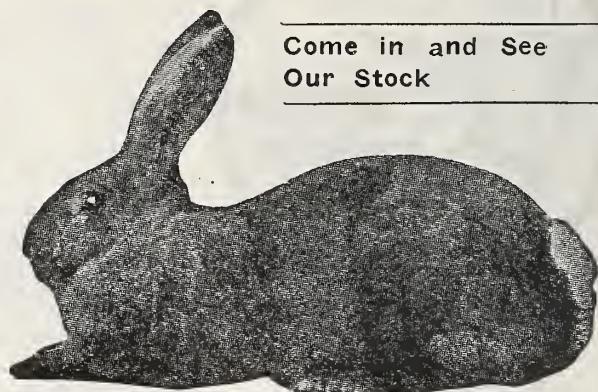
We keep on hand at our East Side Pet Stock Store about 30 pens of Rabbits of different breeds and can bring in on short notice most any stock wanted in this line.

New Method of Pricing

Hereafter we intend to buy and sell Rabbits by the pound; it seems the only fair way to us, and by this method we hope to please our customers and put the Rabbit Industry on a sound basis.

Below we give general description and average weights at maturity (8 months or over). In this way you pay for just what you get.

WHEN YOU ORDER, figure the pound prices according to our weights and we will have little difficulty in filling orders promptly. If there is any difference we will refund.



Flemish Giant Buck

Come in and See
Our Stock

Scale of Prices of Bucks or Does

Young Rabbits, utility stock, 2 months or over, \$1.50 each

Breeders, utility stock, 6 months or over, 50c lb.

Pedigreed Breeders, 8 months or over, 80c lb.

Prize Show Stock and Registered by correspondence

NOTE.—Don't breed under 6 months of age; 8 to 10 months is better.

If you don't understand this price list, write, stating just what you want to buy and we will quote net prices on stock on hand.

Special Note.—The cheapest and quickest results can be obtained by the beginner by buying one or more Bred Does and an extra Buck, not related. Utility Buck service, \$1.00; Pedigreed, \$2.00. Send or bring your does to our East Side Store.

Mature stock is 8 months or over, and weight given is the average.

HIMALAYANS.—Fur bearing. Very attractive; body white, with black nose, ears, feet and tail. The fur is heavy, fine and of recognized value. Weight 4 to 5 lbs.

FLEMISH GIANT—BELGIAN.—Very popular on account of their large size and quick growth, which makes them valuable for market. Color, light squirrel grey to solid black. Weight 8 to 12 lbs.

WHITE ENGLISH.—Very popular pets with children as their white coats and pink eyes make them so attractive. Always in demand as Easter Rabbits. 6 to 8 lbs.

RUFUS RED BELGIANS.—Improved strain of the common Belgian Hare. Color, greyish red; coat fine and soft; weight, 8 to 9 lbs.

NEW ZEALAND REDS.—A hardy, sturdy strain, very popular and much in demand; meat fine in quality and flavor. Color, red. Weight, 8 to 10 lbs.

NEW BOOKS ON RABBITS

GIBSON'S NEW RABBIT BOOK.—The latest and most complete information ever published about rabbits. Gibson is an international judge and has had twenty years' experience with all varieties. Over forty illustrations and full information on housing and hutches; proper handling and selection; breeding, feeding, selling, shipping and exhibition. This book covers all breeds and gives tested recipes for cooking and serving as food; fur proposition, etc. Latest edition, 200 pages, 5x7; well printed on white book paper. Price, paper cover, \$1.10, postpaid. Cloth cover, \$1.60.

WESTERN RABBIT BOOK.—Complete text book on the rabbit industry by C. A. Richey, Los Angeles, Cal. Well printed and nicely illustrated. Covers about the same subjects as the above book but is not as complete in all departments. Very valuable for the beginner. Size 6x9 inches; 70 pages; paper cover. Price, 75c; postpaid, 80c.

THE RABBIT COOK BOOK.—The most complete and up-to-date book of the kind printed. Containing over 115 recipes of the very latest, on preparing and serving rabbits. Without one of these books you cannot realize the value of this most nutritious meat. Size 5x7; paper cover; 64 pages. Price, 60c; postpaid, 65c.

THE BELGIAN HARE GUIDE.—Valuable instructive book, devoted to the care, feeding, breeding, housing and diseases of the Belgian Hare, complete and up-to-date. One chapter on Flemish Giants. Good value for the price. Size 6x9; 48 pages; illustrated; paper cover. Price, 35c, postpaid.

RABBIT CULTURE AND STANDARD.—This is a book full of valuable information covering rabbits of all kinds, their breeding, rearing, diseases, remedies, housing, etc. This book gives standard weights and measurements, color and all points of all modern breeds. 132 pages. Price 60c; postpaid 65c.

Save time, energy and money by reading these practical and up-to-date books. Did you ever stop to think that a few hours' reading now and then will give you valuable information that it has taken others years of labor and experience to obtain?

Rabbit Foods, Remedies, Supplies

Caldwell's Rabbit Remedies

All tried and tested, of real merit. Full directions on each package.

	Prices Postpaid
Globber Remedy.—Sure cure.	35c, 50c, 75c
Ear Remedy.—Sore ears.	50c, 75c
Eye Remedy.	75c
Sore Hock Remedy.	50c, 75c
Vent Remedy.—Very valuable.	35c, 50c, 75c
Diarrhoea Remedy.	50c, 75c
Mange Remedy.	75c
Snuffle Remedy.—Colds, etc.	\$1.00
Rabbit Tonic.—Regulator.	75c, \$1.00
Buck Tonic.—Keeps the males in vigorous, healthy condition.	\$1.00 pkgs.; postpaid \$1.10

Rabbit and Cavie Feeders

MOE'S RACK.—Use this sanitary feeder. Put hay, vegetables or green feed in the top and grain in the bottom. 12 in. high, 9 in. wide. (P. P. wgt. 2½ lbs.) Price, 80c.

Note.—This is also an excellent feeder for poultry. See page 141.

FEHR'S IMPROVED SELF-CLOSING WIRE HAY RACKS.—Very convenient; keep the hay off the floor. Each 35c; doz. \$3.50.

ROUTLEDGE DISINFECTANT.—Harmless to rabbits but effective. Write for prices.

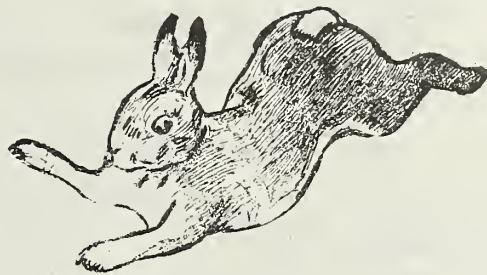
Ideal Feed and Water Dishes

Made especially for rabbits, cavies and small pets. Cannot tip over, and the saving in feed soon pays for them. See illustration.

No. 2.—Earthenware, heavily glazed; the in-curving top rim prevents the nosing out of feed. Will not tip over.

Prices: 6-inch, 25c each, \$2.50 doz.; 8-inch, 30c each, doz. \$3.25. If wanted by parcel post, add 8c each or 50c doz. for safe packing and postage at 2 lbs. each.

No. 5.—Heavy galvanized half bowl shape, to hang on cage door or partition. Our new style, cannot drop or be knocked off. Each 30c, doz. \$3.25. Mailing wgt. 1 lb. each. Postage extra.



Rabbit Salt Blocks

These are pure salt, contain no medical preparations. Flat, square cakes with a nail hole in center. Nail to the wall or wire to hutch door. Rabbits should have salt before them and this is the ideal form. **Prices, 10c each, 75c doz., postpaid.** Gross price on request.

RABBIT EAR TATTOO NEEDLES, \$1.00.

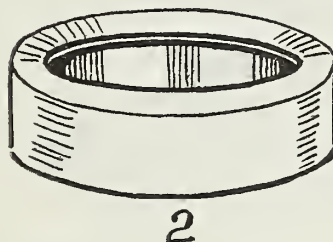
TATTOO INK, BOTTLE, 25c.

Routledge Rabbit Feed

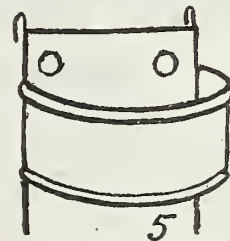
Excellent for Guinea Pigs

This is a real feed prepared especially for Rabbits and Guinea Pigs. It is a mixture of ground and rolled grains, alfalfa meal and molasses. It will give good results.

Price: 4 lbs. 25c; 10 lbs. 50c; 100 lbs., write.



2



5

Cavies — Guinea Pigs

Bright, active and harmless pets. They are in much demand and money can be made raising them. They come in combination colors of brown, white, yellow, black and tan, generally spotted and prettily marked. Solid colors are not always obtainable and are higher in price.



English Cavy (Guinea Pig)

ENGLISH.—Smooth, short hair; hardy and healthy. Young Females, \$1.00; Young Males, 75c and \$1.00; Old Females, \$1.50. Males, \$1.00 and \$1.25. A select breeding pair. \$2.50.

BOOKS.—The Raising and Care of Guinea Pigs (Smith), 50c.

Cavies, New Book, nicely illustrated; complete, (Gardner), 75c.

ROUTLEDGE H. Q. BIRD AND PET FEEDS AND REMEDIES

Take no chance by buying ordinary stocks. Insist on "H. Q." brand, "Best by Test." The Routledge Bird, Pet and Animal Company (see page 4) supply all kinds of Birds and Pets, Feed, Remedies, Books and Pet Stock Supplies. Call, write or order through your dealer.

Spratt's Pet and Poultry Foods, Remedies, Etc.

Known and used the world over. None better. We have hundreds of customers and now buy in carload lots. Prices subject to market changes. Spratt's descriptive Dog Culture Book and Catalog free.

Spratt's Dog Foods

NOTE.—ADD POSTAGE on all sizes if wanted by parcel post and allow a little extra weight of packing.

SPRATT'S DOG CAKES.—A properly balanced meat, grain meal and vegetable compound that will not spoil with age. Known and recommended the world over as a complete and constant food for dogs. Most owners of dogs rely on scraps from the table as "dog feed." This is all right as far as it goes, but to be on the safe side and for vacation trips, etc., always keep a supply of Dog Cakes on hand.

Prices: (Whole) 2-lb. cartons, 45c; 5-lb. bags, 90c; 10-lb. bags, \$1.70; 25-lb. bags, \$3.75; 50-lb. bags, \$7.25; 100-lb. bags, \$14.00.

DOG CAKES.—(Kibbled.) Nut size, 2½-lb. carton, 45c; 5-lb. bags, 90c; 10-lb. bags, \$1.70; 25-lb. bags, \$4.00; 50-lb. bags, \$7.25; 100-lb. bags, \$14.00.

COD-LIVER OIL BISCUITS are invaluable for old or delicate dogs or those recovering from sickness. Dogs eat them without coaxing.

Prices: 2-lb. cartons, 45c; 5-lb. bags, \$1.00; 10-lb. bags, \$1.80; 25-lb. bags, \$4.00; 50-lb. bags, \$7.60; 100-lb. bags, \$14.75.

FIBO for Puppies or Growing Dogs.—For shy feeders or those recovering from sickness, or as a change of food at any time for all dogs. Small nut size.

Prices: 2-lb. cartons, 45c; 5-lb. bags, \$1.00; 10-lb. bags, \$1.85; 25-lb. bags, \$4.25; 50-lb. bags, \$8.25; 100-lb. bags, \$16.00.

Spratt's Puppy Foods

A perfect and whole food for puppies of all breeds. Puppies should be started on these biscuits when about one month old, and they should be continued until such time as their teeth become sound and strong, usually when they are about six months old.

PUPPY CAKES.—2-lb. cartons, 45c; 5-lb. bags, 90c; 10-lb. bags, \$1.70; 25-lb. bags, \$4.00; 50-lb. bags, \$7.50; 100-lb. bags, \$14.50. (Packed in boxes, ½c lb. extra.)

MIDGET FIBERINE and MIDGET CHARCOAL BISCUIT, per 2-lb. carton, 50c.

BONE MEAL FOR PUPPIES.—The strong frame builder. 3-lb. tin can, 45c.

Spratt's Cat Foods — Remedies

Spratt's Cat Food.—A complete food for cats. Used at the leading catteries throughout the world and daily becoming more popular among the fancy. Small pkg. (P. P. 1 lb.), 25c; large pkg. (P. P. 2¾ lbs.), price 45c. Add postage.

Vermifuge Capsules for Cats. Postpaid 50c.

Distemper Tablets for Cats. Postpaid 75c.

Tonic and Condition Tablets for Cats. Postpaid 50c.

Cat Soap, Combs, etc., 156-157; Books, 153.



Spratt's Poultry and Game Bird Foods

A cooked food for Chickens, Pheasants and Turkeys, the basic ingredients of which are wheat and meat.

After being cooked and baked, is reground into three sizes:

No. 12—Pinhead size for baby chicks.

No. 5—Rice grain size, chicks over three weeks.

No. 3—Split pea size, adult birds.

In ordering be sure and state size wanted.

PRICES: 1 lb., 15c; 5 lbs., 70c; 10 lbs., \$1.30; 25 lbs., \$3.00. Write for quantity prices. Postage extra.

Spratt's Remedies and Medicines

DOG SOAP (White).—Kills lice and fleas, prevents skin diseases and leaves the coat smooth and glossy, contains no tar, nicely perfumed. Per cake, 25c; postpaid, 30c.

Antiseptic Soap (Black).—For cuts, wounds, ulcers, etc., disinfectant and germicide. Cake, 50c; postpaid, 55c.

Chronic Skin Disease Tablets.—Postpaid 60c.

Alternative Cooling Tablets.—For heated blood, etc. Postpaid 60c.

Digestive Tablets.—For severe cases of indigestion. Postpaid 60c.

Diarrhoea Tablets.—To relieve diarrhoea. Postpaid 60c.

Distemper Tablets.—For toy dogs and puppies. Postpaid 85c.

Ear Canker Ointment.—Postpaid 60c.

Eye Lotion (tablet form.)—Postpaid 60c.

Eczema Remedy.—Postpaid 60c.

Hair Stimulant and Restorer.—Postpaid 60c.

Liver Tablets.—Postpaid 50c.

Locurium Ointment.—For wounds, cuts and bruises. Postpaid 50c.

Purgative Tablets.—Perfectly safe and effective. Postpaid 60c.

Tonic and Condition Tablets.—For toy dogs and puppies. Postpaid 60c.

Worm Capsules.—Dog's remedy for Round, Maw, Tape Worms. Postpaid 60c.

Worm Capsules for Puppies.—May be given with perfect safety. Postpaid 60c.

Vermifuge Capsules.—For toy dogs and puppies. Postpaid 50c.

Mange Remedy.—Pints 50c; prepaid 65c.

SPRATT'S DOG CULTURE.—New edition, 48 pages, contains valuable information on the care, management, breeding, rearing and feeding. Also tells all about Spratt's Food, Remedies and Supplies. **FREE UPON REQUEST.**

Symptoms of the most prevalent Poultry Diseases and Ailments

Preserve this Circular. Knowing how to tell what is wrong may save your whole flock some day.

ROUP

Nostrils closed. Running at the nose.
Face swollen. Comb pale.
Whistle or sneeze when breezing.
Breath with Catarrhal odor.

WHITE DIARRHEA

Chick droops wings.
Eye listless and chicks generally weak.
First symptoms usually a white, chalky deposit on down below the vent.
Severe diarrhea; droppings gummy.

CANKER

Hard swelling on face.
Yellow or cheesy growth may show in roof of mouth.
Eye distended. Breath foul.

BRONCHITIS

Fowl rattles, not sneezes, when breathing.
Labored breathing.
Eyes bright. Comb bright.

CATARRH

Gummy deposit around nostril.
Froth in eyes.
Frequent shaking of head due to irritation.
Similar to roup; in fact, usually forerunner of roup.

DIPHTHERIA

False membrane in nostrils, throat, mouth and eyes.
Foul odor not like roup.
Membranes bleed when removed.

PIP

Tip of tongue hard. Nostrils usually closed.
Breath through mouth.

PNEUMONIA

Rapid and labored breathing.
Bloody mucous may show at corner of mouth.
Comb dark red or bluish.
Bird sleepy or in a comatose condition.

CHOLERA-LIKE DISEASES

Comb dark or bluish. Fowl sleepy.
Feathers rough. Flesh clammy and bloodless.
Droppings showing canary yellow and possibly at times a brown mucous.
Constant diarrhea.
Breath bad and general dejected condition.

SOUR CROP

Crop distended. Soft and full of foul water.
When handled bird belches.
Discomfort plainly visible.

CROP BOUND

Great discomfort. Crop solid and distended.
Bird ravenous and constantly crowding the crop.

BLACKHEAD

Usually develops in young turkeys.
Marked diarrhea. Lack of interest in food.
Head dark in color. General dejected condition.
Wings drooped; legs weak, feathers ruffled.

TUBERCULOSIS

Lack of life. Rapidly loses weight.
High temperature.
Usually violent diarrhea.

LIMBERNECK

Fowl loses partial or complete control of its neck.
Bird weak and head drags on ground when it attempts to walk.

GAPES

Chick gapes constantly. Rapidly weakens.
Stands with eyes closed.

CHICKEN POX or SOREHEAD

Dark, warty spots on comb and face. When removed, discharge a yellowish liquid.

FAVUS

Scaly gray spots on comb and face.
Grow in numbers until entire comb, face and neck are covered.

RHEUMATISM

Stiff joints. Muscles contracted.
Toes sometimes drawn under foot.
Bird walks stiffly and lame.

BUMBLEFOOT

Foot swollen. Hard calloused place on bottom of foot.
Foot very sore and may be quite dark or bluish above the toes.

COCCIDIOSIS

Attacks chicks and old fowls.
Dullness. Weakness. Sleepiness. Diarrhea.
Loss of weight. Bloody droppings.

LEG WEAKNESS

Chicks wobbly on legs. Sit down to eat.
Drag along on hocks.

INTESTINAL WORMS

Wasting away. Slight Diarrhea. Worms in droppings.
Fowls mope. Dull. Listless.

CONSTIPATION

Dullness. Loss of appetite.
Birds stand with arched back.
Walk with difficulty.

BROODER PNEUMONIA (Aspergillosis)

Slight catarrh. Fast breathing. Chicks mope.
Emit croupy sound. Weakness. Fever.
Drooping wings. Excessive thirst.

LICE, MITES, TICKS, FLEAS

Restlessness.
Fowls pick and scratch selves.
Grow listless and thin.
Little chicks suffer bowel trouble and wings droop.

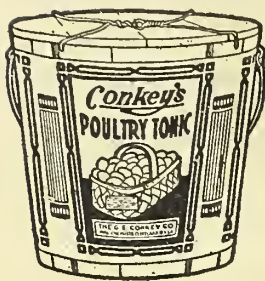
LIVER TROUBLE

Comb and wattles fade, gradually changing to dark red or purple.
Loss of appetite. Sluggishness.

Conkey's Free 80-Page Poultry Book

Describes diseases in detail, prescribes treatment; tells how to raise poultry successfully; chapters on housing, culling of hens, feeding, how to raise baby chicks, etc. Ask for free copy or send 6c direct to The G. E. Conkey Co., Cleveland, Ohio.

Conkey's POULTRY TONIC



EVERY bird from chick to maturity will be more productive, healthier and more profitable if given a good tonic and regulator. Conkey's Poultry Tonic helps birds get more out of their feed. They produce more eggs and better flesh on LESS FEED, by better digestion and assimilation. Don't keep lazy hens eating their heads off when with a little assistance they can become layers instead of loafers.

Conkey's Tonic is all medicine—free from filler, red pepper, and "hot stuff" to overstimulate the birds and break down their health. Conkey's builds on a natural, healthy basis, inducing steady and persistent laying. Keeps the young chicks growing, makes molting easy, strengthens the bird for bad weather and generally maintains a high health average.

*Price	25c	50c	\$1.00	12-lb. Pail	25-lb. Pail	\$5.00	\$9.50
Shipping Weight	3 lbs.	5 lbs.	10 lbs.	16 lbs.	31 lbs.	50-lb. bag	100-lb. bag

Conkey's SORE HEAD (CHICKENPOX) REMEDY—Don't let this disgusting and highly contagious disease get a start. Many a fine bird has been permanently ruined by neglect. Little brown or black warty spots appear on comb, face and wattles. Under these warts is a pocket of virulent pus. Conkey's Sore Head Remedy attacks the trouble from two angles—a powder for the blood and a salve for rubbing on affected parts. Both treatments in package—for one price. This remedy is used for pigeon pox, Pian, warts and similar afflictions. Packages, 25c, 50c, 30c, 55c, postpaid; breeder size (1 lb. salve, 5 lbs. powder), \$3.50; (10 lbs. powder only), \$3.50; \$3.65 postpaid.

Conkey's BLACKHEAD REMEDY—Turkey breeders should have a package ready for instant use, for Blackhead is very hard to cure in an advanced stage. When used soon enough, Conkey's Blackhead Remedy is ordinarily effective. Package 50c; 55c postpaid.

Conkey's POULTRY CONDITIONER—Highly concentrated fowl regulator, blood purifier and nerve food, to build up birds in rundown condition, or for fowls recovering from disease. Splendid for putting birds in condition for shows and sustaining them during exhibition. Package, 25c, 50c; 30c, 55c postpaid.

Conkey's LIMBERNECK REMEDY (Ptomaine Poisoning) should be kept on hand as Limberneck is an ailment which must be treated promptly. Conkey's seldom fails to give relief if used in time. Packages, 50c; 55c postpaid.

Conkey's FLY KNOCKER—Few preparations have the reputation of this wonderful fly repellent. It is a "fly chaser" that does all claimed for it. Dairymen, drivers, horsemen, stock raisers, cattlemen, sheep raisers declare this remedy the best investment they make—animals free from insects do better in milk and butter fat production, while growing stock unquestionably fattens faster when relieved from biting, stinging, disease-spreading insects.

	Quarts	Half Gallon	Gallons	5 Gallons	10 Gallons
*Price	60c	90c	\$1.50	\$7.25	\$14.00
Shipping Weight	4 lbs.	10 lbs.	15 lbs.	58 lbs.	110 lbs.

Conkey's COW SPECIAL—Used as a tonic to build up cows in run-down condition and as an aid to food assimilation. Packages, 50c, \$1.00, postpaid.

Conkey's STOCK TONIC—A general conditioner of real merit for live stock. Not a food, but a medicine—all pure medicine, without any filler. Mix it with regular feed. This makes your own stock food at home.

			12-lb. Pail	25-lb. Pail		
*Price	25c	50c	\$2.10	\$3.45	\$4.75	\$9.00
Shipping Weight	3 lb.	5 lb.	16 lbs.	31 lbs.	50-lb. bags	100-lb. bags

Conkey's LICE PREPARATIONS

Conkey's LICE POWDER is for dusting hens, nests, growing chicks and for use wherever body lice must be overcome.

				12-lb. Pail	25-lb. Pail
*Price	10c	25c	50c	\$1.40	\$2.75
Shipping Weight	1 lb.	2 lbs.	5 lbs.	16 lbs.	31 lbs.

Conkey's LICE LIQUID is for painting roosts, fittings, the inside of house, nest boxes, and wherever mites congregate.

	Quarts	Half Gallon	Gallons	5 Gallons
*Price	60c	90c	\$1.50	\$7.00
Shipping Weight	4 lbs.	10 lbs.	15 lbs.	54 lbs.

Conkey's HEAD LICE OINTMENT is for overcoming and preventing the murderous head louse, which "eats up" baby chicks. Packages, 10c, 25c, postpaid.

Conkey's LICE FIX is a preparation in ointment form, for fighting body lice. This method is advocated by some authorities as preferable to powder. One application lasts a month. Packages, 25c, 50c, postpaid.

*Weights here given are for parcel post shipments, if shipment weighs 70 pounds or less for zones up to and including the third, and 50 pounds or less for zones up to and including the eighth. Larger shipments are sent express or freight collect. In remitting with order, consult weights and add postage for your zone. Postmaster can tell you in what zone you live from Portland.

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In filling this order we will use the greatest care to have it true to name, and will replace any that may prove untrue. But no sale by us carries a warranty of quality, express or implied, and for any error we shall not be liable for more than the purchase price. Every purchase from us is made on these terms.

ROUTLEDGE SEED & FLORAL CO.

ROUTLEDGE SEED & FLORAL CO.

NAME _____		DO NOT USE THESE SPACES
POST OFFICE _____ R. F. D. NO. _____		
STATION _____ (If different from P. O.)		
COUNTY _____	STATE _____	
DATE _____ AMOUNT ENCLOSED, \$ _____		
FORWARD BY _____ State if wanted by Mail, Express, Freight or Steamer. (Read Note on bottom of this page.)		Ack. O. K'd by.....

**DO NOT USE
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Ack.

O. K'd by.....

Quantity.	NAMES OR ARTICLES WANTED.	Amount.	
	Amount Carried Forward		

NOTE.—Before you send this order read carefully what we have to say about parcel post and transportation charges on inside front cover and on page 1.

REFERENCE TABLES

Quantity of Seeds to produce a given number of plants or to sow an acre

We have carefully revised and lowered the following amounts so that you will NOT PLANT TOO MUCH and thereby WASTE seed while they are HIGH AND SCARCE.

Vegetable Seeds

	Per Acre		Per Acre
Asparagus—1 oz. to 200 plants....	3 lbs.	Kohl-Rabi—1 oz. to 300 ft. drill....	2 lbs.
Beans, Dwarf—1 lb. to 125 ft. drill.	40 lbs.	Leek—1 oz. to 100 ft. drill.....	3 lbs.
Pole—1 lb. to 150 ft. drill.....	35 lbs.	Lettuce—1 oz. to 200 ft. drill.....	3 lbs.
Pole—1 lb. to 200 hill.....	25 lbs.	Melon, Musk—1 oz. to 50 hills.....	2 lbs.
Field—1 lb. to 200 ft. drill.....	30 lbs.	Water—1 oz. to 35 hills.....	2 lbs.
Lima—1 lb. to 75 hills.....	40 lbs.	Okra—1 oz. to 100 ft. drill.....	5 lbs.
Beet, Table—1 oz. to 60 ft. drill....	6 lbs.	Onion Seed—1 oz. to 200 ft. drill..	3 lbs.
Mangel—1 oz. to 75 ft. drill....	5 lbs.	For Sets—	50 lbs.
Broccoli—1 oz. to 3,000 plants....	3 ozs.	Onion Sets—1 lb. to 35 ft. drill....	200 lbs.
Brussels Sprouts—1 oz. to 3,000 P..	3 ozs.	Parsnips—1 oz. to 300 ft. drill....	3 lbs.
Cabbage—1 oz. to 3,000 plants....	3 ozs.	Parsley—1 oz. to 350 ft. drill.....	2 lbs.
Carrot—1 oz. to 150 ft. drill.....	2½ lbs.	Peas, Dwarf—1 lb. to 125 ft. drill.	30 lbs.
Cauliflower—1 oz. to 4,000 plants..	3 ozs.	Tall—1 lb. to 150 ft. drill.....	60 lbs.
Celery—1 oz. to 5,000 plants.....	3 ozs.	Pepper—1 oz. to 2,000 plants.....	4 ozs.
Chicory—1 oz. to 100 ft. drill.....	4 lbs.	Potatoes	600 to 700 lbs.
Corn, Sweet—1 lb. to 150 ft. drill... 18 lbs.		Pumpkin—1 oz. to 35 hills.....	3 lbs.
Sweet—1 lb. to 160 hills.....	15 lbs.	Radish—1 oz. to 100 ft. drill.....	10 lbs.
Corn Salad—1 oz. to 50 ft. drill... 5 lbs.		Rutabaga—1 oz. to 250 ft. drill....	2 lbs.
Cress—1 oz. to 40 ft. drill.....	1 lb.	Salsify—1 oz. to 100 ft. drill.....	8 lbs.
Cucumber—1 oz. to 50 hills.....	2 lbs.	Spinach—1 oz. to 100 ft. drill.....	10 lbs.
Egg Plant—1 oz. to 3,000 plants.. 4 ozs.		Squash, Summer—1 oz. to 50 hills..	2 lbs.
Endive—1 oz. to 300 ft. drill.....	4 lbs.	Winter—1 oz. to 35 hills.....	3 lbs.
Horseradish Roots	10 to 15 M.	Tomatoes—1 oz. to 3,000 plants....	3 ozs.
Kale, Table—1 oz. to 3,000 plants.. 1 lb.		Tobacco—1 oz. to 4,000 plants.....	
Stock—1 oz. to 300 ft. drill.....	2 lbs.	Turnips—1 oz. to 250 ft. drill.....	2 lbs.

Field, Farm, Grass and Clover Seeds

	Quantity per Acre		Quantity per Acre
Alfalfa	12 to 25 lbs.	Rye Grass—for Pasture.....	30 lbs.
Artichokes	400 to 600 lbs.	Rye Grass—for Lawn	100 lbs.
Barley—(drills 75 lbs.) ...broadcast	100 lbs.	Sudan—drills	3 to 5 lbs.
Buckwheat—(drills 30 lbs.)..broadcast	50 lbs.	Broadcast	16 to 20 lbs.
Cheat	100 lbs.	Kaffir Corn—drills	6 to 10 lbs.
Clover—Alsike and White.....	6 to 10 lbs.	Millet—for Seed	20 lbs.
White for lawn.....1 lb. to 25 ft. square		For Hay	30 lbs.
Crimson	10 to 15 lbs.	Oats—for Seed	80 to 100 lbs.
Red	8 to 15 lbs.	For Hay	100 lbs.
Sweet	15 to 20 lbs.	Peas, Field—100 lbs. or 80 lbs. with 35 lbs. Oats	
Corn, Field—Hills	15 lbs.	Rape—(drills 3 lbs.).....broadcast	5 lbs.
For Fodder, drills	50 lbs.	Rye—for Grain	80 to 100 lbs.
Grass, Kentucky Blue—Pasture.20 to 30 lbs.		For Hay	100 to 120 lbs.
Kentucky Blue—for Lawns.1 lb. to 15 ft. sq.		Speltz or Emmer	80 lbs.
Mixed Lawn	1 lb. to 15 ft. sq.	Sugar Cane	10 to 12 lbs.
Red Top—Common	25 to 30 lbs.	Sunflower	5 to 7 lbs.
Red Top—Hulled, Solid Seed.10 to 15 lbs.		Timothy	12 to 15 lbs.
Orchard	25 to 30 lbs.	Vetches—85 lbs. or 60 lbs. with 40 lbs. Grain	
Brome Grass	25 to 30 lbs.	Vetch, Hairy or Sand.....	30 lbs.
		Wheat	80 to 100 lbs.

Suitable Distance for Planting Trees and Plants

Note.—In planting in the home garden for hand cultivation you can set plants or trees closer.

Apples, Standard	20 to 30 feet	Currants	4 by 4 feet
Apples, Dwarf	10 to 12 feet	Gooseberries	4 by 4 feet
Pears, Standard	18 to 20 feet	Raspberries	3 by 6 feet
Pears, Dwarf	10 feet	Trailing Berries, Logans, etc..	6 by 8 feet
Peaches and Apricots	16 to 18 feet	Other Blackberries	2½ by 6 feet
Cherries, Sweet	20 to 25 feet	Strawberries, in Hills.....	1½ by 2½ feet
Cherries, Sour	16 to 20 feet	Strawberries, Matted Rows... 2½ by 4 feet	
Plums and Prunes.....	16 to 20 feet	Asparagus, in Beds	1 by 1½ feet
Quinces	10 to 12 feet	Asparagus, in Field	1 by 4 feet
Grapes	5 by 12 feet	Rhubarb	2 by 4 feet

Number of Trees or Plants On An Acre

1 by 2 feet.....	21,780	3 by 5 feet.....	2,904	12 by 12 feet.....	802
1 by 3 feet.....	14,520	3 by 6 feet.....	2,420	15 by 15 feet.....	193
1 by 4 feet.....	10,890	4 by 4 feet.....	2,722	16 by 16 feet.....	170
1½ by 2 feet.....	14,520	4 by 6 feet.....	1,815	18 by 18 feet.....	135
1½ by 3 feet.....	9,680	6 by 8 feet.....	907	20 by 20 feet.....	109
2 by 3 feet.....	7,260	6 by 6 feet.....	1,210	25 by 25 feet.....	70
2 by 4 feet.....	5,445	8 by 8 feet.....	680	30 by 30 feet.....	48
3 by 4 feet.....	3,630	10 by 10 feet.....	430	40 by 40 feet.....	27

RULE.—Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet, for each plant or hill, which, divided into the number of square feet in an acre (43,560), will give the number of plants to the acre.

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